

Agricultural Trade

Relatively strong growth in the volume of global and U.S. agricultural trade is projected during the next 10 years, aided by ample global supplies and steady demand growth. Demand prospects are driven by the outlook for healthy economic growth in most of Asia, Latin America, North Africa, and the Middle East, moderate gains in developed countries, and continued progress toward freer trade through ongoing unilateral policy reforms and existing multilateral agreements. The solid prospects for trade expansion in these regions are expected to more than offset relatively weak growth in parts of Asia, Africa, and the former Soviet Union.

Global and U.S. commodity prices and trade value have been weak in recent years because of large stocks resulting from weakened global demand and large production in the late 1990s. Even with continued output and productivity gains in exporting countries, commodity prices and export earnings are projected to strengthen in the baseline because of steady growth in import demand and reduced U.S. and foreign stocks.

Future trends in China's agricultural trade are key in the global outlook for commodity trade and prices. The baseline includes steady growth in China's imports of most commodities. However, policy other than market forces determines much of China's trade in agricultural commodities and significant uncertainties exist regarding future policies in China. The size of China's agricultural economy increases the potential significance of these issues for world trade.

The baseline shows improved trade growth for several bulk commodities during 2000-2010, compared with the 1980s and 1990s. Projected growth in wheat and coarse grains trade is particularly strong compared with recent performance, and cotton trade is projected to improve from the contraction of the 1990s. The expansion of grain trade is broad based, driven by rising incomes in developing regions, diet diversification, and increased demand for livestock products and feeds. The phase out of the Multi-Fiber Arrangement (MFA) by 2005 is expected to boost demand for raw cotton in developing countries, while gradually shifting demand in developed countries from raw cotton to processed cotton products (textiles and apparel).

Global trade in soybeans and products is projected to continue growing, but at a much slower rate than the rapid growth of the 1990s. Continued strong gains in developing-country demand for feed protein is projected to be mostly offset by reduced demand in the EU that results from slowed livestock output and increased substitution of grain for protein feeds following Agenda 2000 reforms. Growth in soybean oil trade is projected slower than the very high rate achieved in the 1990s due to increased crushing in developing countries and competition from other oils, particularly palm oil.

U.S. export volume is projected to strengthen for wheat, coarse grains, and soybeans and products, rise gradually for raw cotton, and decline for rice. U.S. wheat, coarse grain, and soybean and soybean product exports expand along with world trade, although continued strong competition is expected in these markets. U.S. wheat and coarse grain exports compete with unsubsidized EU wheat and barley throughout the projection period. Argentina is expected to remain a strong competitor for coarse grain market share. Eastern Europe also begins to make its presence felt as an exporter in world corn markets early in the projection period. U.S. raw

Table 36. International trade summary, by decade or indicated period 1/

Years	Coarse			Soybean	Soybean	Cotton	
	Wheat	Rice	grains	Soybeans	meal		oil
World trade growth, annual percent 2/							
1960 to 1970 3/	1.1	2.2	4.9	11.4	14.4	11.3	0.8
1970 to 1980	4.7	4.9	8.7	8.2	11.7	12.8	1.2
1980 to 1990	-0.3	0.6	-1.0	-0.4	2.9	0.5	2.5
1990 to 2000	0.0	8.1	0.9	6.4	4.3	8.0	-0.9
2000 to 2010	1.7	1.9	2.6	1.3	2.3	2.5	1.3
U.S. export growth, annual percent							
1960 to 1970 3/	-0.8	6.3	3.8	12.6	13.0	5.3	-5.4
1970 to 1980	6.4	6.8	12.7	7.2	5.8	5.4	6.1
1980 to 1990	-3.3	-0.5	-0.7	-3.7	-1.8	-5.5	2.3
1990 to 2000	-1.4	1.7	1.6	4.8	2.9	5.9	-0.7
2000 to 2010	1.8	-3.9	2.0	0.6	1.9	3.6	1.1
U.S. share of world trade, average percent 2/							
1960 to 1970 3/	37.6	19.0	50.0	90.6	65.6	66.6	18.3
1970 to 1980	43.0	22.1	59.4	82.6	43.5	37.5	19.8
1980 to 1990	37.3	20.2	59.4	72.6	23.7	19.3	21.5
1990 to 2000	30.0	13.7	57.0	63.1	18.5	13.8	25.6
2000 to 2010	29.1	8.1	60.0	57.5	17.0	13.3	29.1

1/ Years refer to the first year of the commodity marketing year.

2/ Trade and trade shares include intra-FSU trade for periods starting in 1990 and later; intra-FSU trade for cotton also is included in the 1980 to 1990 and the 1970 to 1980 periods.

3/ Data for soybeans, soybean meal, and soybean oil begin in 1964.

cotton exports remain strong through the baseline, increasing gradually in the second half of the decade due to rising global demand following the MFA phaseout. U.S. rice exports are expected to fall over the baseline period as domestic demand outpaces U.S. production. U.S. exports of soybeans and products continue to grow, albeit at a much slower pace compared with the 1990s, reflecting projected trends in world trade and increasing competition from Argentina and Brazil.

Global meat trade and U.S. meat exports are projected to recover from the recent slowdown in East Asian and Russian demand, showing strong and steady growth during 2000-2010. Prospects for meat trade are supported by the economic rebound in key Asian markets, and by already-negotiated reductions in trade barriers. However, Russian imports are projected to increase gradually and surpass the record levels reached in the late 1990s by the end of the projection period.

U.S. Agricultural Trade Value

Total U.S. agricultural export value is projected to grow on average 4.1 percent annually between 2000 and 2010, reaching \$76 billion in fiscal year 2010, up from nearly \$51 billion in fiscal year 2000. U.S. agricultural imports in fiscal year 2010 are projected at \$53.4 billion, up

from the \$38.9 billion of fiscal year 2000. The resulting agricultural trade surplus of \$22.6 billion in fiscal year 2010 is up annually 6.5 percent on average from 2000, although it is still well below the fiscal year 1996 record export surplus.

In fiscal year 2000, revival of strong economic growth in Asia and Latin America offsets continued low bulk commodity prices, large world supplies, foreign export competition, and a strong U.S. dollar to push U.S. agricultural exports up to \$50.9 billion from \$49.2 billion in fiscal 1999. As economic growth in 2000 raised incomes in the rest of the world, demand for high-value products (HVP) revived, but low prices kept the value of bulk exports unchanged even though volume inched up. Based on information available in November 2000, when work on this baseline was completed, total export value in fiscal year 2001 is expected to increase to \$53 billion. This increase reflects growth in both bulk and HVP exports, with bulk commodities anticipated to show the greater gains. And, the share of HVPs in total agricultural exports, which rose sharply in fiscal year 2000, is anticipated to drop back to a more normal 63.6 percent in fiscal year 2001.

Table 37. U.S. agricultural trade values, baseline projections, fiscal years (October 1 - September 30)

	1998	1999	2000	2001 1/	2002	2003	2004	2005	2006	2007	2008	2009	2010	2000-2010 growth rate
	<i>Billion dollars</i>													<i>Percent</i>
Agricultural exports:														
Animals and products	11.2	10.1	11.8	11.9	12.0	12.5	13.1	13.5	13.9	14.2	14.6	15.2	15.8	3.0
Grains, feeds, and products	14.1	14.4	13.9	14.6	16.0	17.1	17.7	18.2	18.8	19.7	20.6	21.7	22.7	5.0
Oilseeds and products	11.2	8.7	8.5	9.0	9.1	9.7	10.5	11.1	11.7	12.1	12.5	13.0	13.4	4.6
Horticultural products	10.3	10.3	10.5	10.9	11.4	11.8	12.3	12.8	13.3	13.8	14.3	14.7	15.2	3.8
Tobacco, unmanufactured	1.4	1.4	1.2	1.2	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	0.4
Cotton and linters	2.5	1.3	1.8	2.4	2.8	3.1	3.1	3.1	3.2	3.2	3.3	3.3	3.3	6.2
Other exports	2.9	2.9	3.1	3.0	3.3	3.4	3.5	3.6	3.8	3.9	4.0	4.1	4.3	3.4
Total agricultural exports	53.7	49.2	50.9	53.0	56.0	59.0	61.5	63.7	65.9	68.2	70.6	73.4	76.0	4.1
Bulk commodities exports	20.1	17.8	17.8	19.3	20.6	22.0	22.9	23.6	24.4	25.3	26.3	27.5	28.5	4.8
High-value product exports	33.7	31.4	33.1	33.7	35.4	37.0	38.7	40.1	41.5	42.9	44.3	46.0	47.5	3.7
High-value product share	62.7%	63.8%	65.1%	63.6%	63.2%	62.8%	62.8%	63.0%	63.0%	62.9%	62.8%	62.6%	62.5%	
Agricultural imports:														
Animals and products	6.8	7.0	8.1	8.2	8.3	8.5	8.7	8.9	9.0	9.1	9.2	9.4	9.6	1.6
Grains, feeds, and products	2.9	2.9	3.1	3.0	3.1	3.2	3.4	3.5	3.6	3.7	3.8	3.9	4.0	2.7
Oilseeds and products	2.1	1.9	1.9	1.9	1.8	1.9	1.9	2.2	2.4	2.5	2.6	2.7	2.8	4.2
Horticultural products	13.8	15.3	15.8	16.4	17.0	17.6	18.3	19.1	19.8	20.6	21.4	22.2	23.1	3.8
Tobacco, unmanufactured	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	3.5
Sugar and related products	1.7	1.6	1.5	1.7	1.7	1.7	2.2	2.1	2.1	2.2	2.3	2.9	2.9	6.7
Coffee, cocoa, and rubber	6.3	5.2	5.2	5.4	5.5	5.6	5.7	5.9	6.0	6.1	6.2	6.4	6.5	2.3
Other imports	2.4	2.6	2.6	2.7	2.8	2.8	3.0	3.1	3.2	3.2	3.4	3.5	3.6	3.2
Total agricultural imports	36.8	37.3	38.9	40.0	40.9	42.2	44.0	45.5	46.8	48.2	49.7	51.9	53.4	3.2
Net agricultural trade balance	16.9	11.9	12.0	13.0	15.1	16.8	17.5	18.2	19.1	20.0	20.9	21.5	22.6	6.5
	<i>Million metric tons</i>													
Agricultural exports (volume):														
Bulk commodity exports	98.4	113.8	115.4	122.9	125.6	126.4	127.1	128.8	130.5	132.9	135.7	138.7	141.3	2.0

1/ The projections were completed in November 2000 based on policy decisions and other information known at that time. For updates of the nearby year forecasts, see USDA's *Outlook for U.S. Agricultural Trade* report, published in February, May, August, and December.

Note: Other exports consists of seeds, sugar and tropical products, and beverages and preparations. Essential oils are included in horticultural products. Bulk commodities include wheat, rice, feed grains, soybeans, cotton, and tobacco. High-value products (HVP's) is calculated as total exports less the bulk commodities. HVP's include semi-processed and processed grains and oilseeds, animals and products, horticultural products, and sugar and tropical products. Other imports includes seeds, beverages except beer and wine, and miscellaneous commodities.

Both bulk and HVP exports are expected to show relatively strong average annual growth in the decade to 2010, while their shares in total U.S. exports remain about stable. HVPs will continue to account for the larger share, about 63 percent of total agricultural exports. HVP agricultural export value is projected up 3.7 percent per year on average, while bulk products rise 4.8 percent annually. Much of the growth expected in HVPs is likely to be for fresh and processed fruits, processed vegetables, beef, sugar and tropical products, and animal feeds. Bulk product growth reflects an expected recovery of prices, since bulk volume is projected up only 2 percent

annually on average. The growth expected in bulk value lends strength to total export earnings, in contrast to the average annual decline in bulk commodity export value in the 1990s. All the major commodity groups that contain bulk commodities—grains and feeds, oilseeds and products, tobacco, and cotton and linters—are expected to show stronger annual growth rates in the coming decade than in the previous decade.

U.S. agricultural imports are expected to increase an average of 3.2 percent per year in 2000-2010, compared to an average 6.8 percent from 1994 to 2000. The average 3.2-percent long-term import growth outlook reflects the real expansion of the domestic economy and the dollar's exchange value. Imports of horticultural products, which made up 41 percent of total U.S. agricultural imports in fiscal year 2000, will increase 3.8 percent annually through 2010, indicating continued strong import demand for fruits, nuts, vegetables, wine, and malt beverages.

Foreign Agricultural Policy Assumptions and Projection Highlights

Policy assumptions underlying both U.S. and foreign projections are based on full compliance with all bilateral and multilateral agreements affecting agriculture and agricultural trade as of October 2000, including the Uruguay Round Agreement on Agriculture and the North American Free Trade Agreement. In contrast, no compliance is assumed for any agreements not formally ratified by October 2000. Several potential multilateral agreements that could have a significant impact on agricultural trade are now under consideration, but are assumed not to occur in these projections. These include:

- No accession to the World Trade Organization (WTO) by China, Taiwan, or any other country not formally admitted as of October 2000;
- No enlargement of the EU-15 to add one or more Central or East European countries;
- No implementation of more liberalized trade among the Asia-Pacific Economic Cooperation (APEC) countries;
- No expansion of NAFTA to include additional countries, and;
- No implementation of any reforms under consideration in the current round of WTO negotiations.

Domestic agricultural and trade policies in individual foreign countries are assumed to continue to evolve along their current path, based on the consensus judgment of USDA's regional and commodity analysts. In particular, economic and trade reform underway in many developing countries is assumed to continue. Similarly, the development and use of agricultural technology and changes in consumer preferences are assumed to continue to evolve based on past performance and analyst judgment regarding future developments. Key assumptions underlying the projections for major foreign countries are summarized below.

European Union

The baseline projections for the EU continue to incorporate EU commitments under the Uruguay Round Agreement that limit subsidized exports and improve access to the EU market. Also incorporated are the Agenda 2000 financial and agricultural policy reforms that were adopted in early 1999. However, impacts of the anticipated accession of the Central and Eastern European countries to the EU are not included in the projections. Although eastward enlargement of the EU is likely to have significant implications for agriculture, it is not incorporated into the baseline because of the high degree of uncertainty regarding the final terms and timing of enlargement. Also excluded from these projections are estimates of any EU consumer response to food safety concerns associated with recent outbreaks of bovine spongiform encephalopathy (BSE), as well as estimates of any shifts in protein meal consumption and trade stemming from the EU's recently imposed temporary ban (six months beginning January 1, 2001) on use of meat and bone meal as a feed additive.

The baseline projections assume that the EU's Uruguay Round commitment to reduce domestic support is not a binding constraint, since many EU domestic support policies meet WTO "production limiting" criteria and are thereby exempt from reduction commitments. Tariffication of non-tariff barriers and tariff reductions are expected to have little impact because the high tariffs established for most products are unlikely to permit significant additional imports. Continued high levels of import protection mean that price transmission from the world market will be negligible for many baseline commodities except wheat, barley, and oilseeds and products. The most important Uruguay Round commitments for the baseline are the limits on subsidized exports and the minimum import levels agreed under the market access provisions. Even with the Agenda 2000 reforms, there is uncertainty about the measures the EU will use to meet these commitments. It is assumed that the EU will use existing policy mechanisms to comply with WTO commitments without excessive stock accumulation.

Agenda 2000 includes reforms of the grains, oilseeds, dairy, and beef sectors for the period 2000-2006. The reforms will shift more intervention from price supports to direct payments and modify supply control measures. The principal reforms affecting the baseline are:

- **Reduced intervention prices:** A 15-percent drop in the cereal intervention price over two years (2000-2001), a 20-percent drop in beef support price over 3 years (2000-2002), and a 15-percent decrease in dairy support prices to be phased in over 3 years starting in 2005.
- **Modified direct income support:** An increase of 9 euros/ton for cereal producers to compensate for half of the drop in the intervention price. Direct payments for oilseeds will be aligned to cereal aid (33-percent drop) in 3 years. An increase in per-animal beef payments, and a new payment per quantity of milk produced starting in 2005.
- **Reduced default land set-aside rate:** The default rate was reduced from 17.5 percent to 10 percent. The set-aside rate will be set at the default rate unless all member states agree on a different rate. A 10-percent set-aside rate is assumed for the duration of the baseline.

- **Maintaining the milk quota:** Dairy quotas are retained for the duration of Agenda 2000 and increased by 2.4-percent. Half of the quota increase is allocated to “deficit” regions from 2000-2001, and the other 1.2-percent increase will be spread over the remaining regions from 2005 to 2008.

For the baseline, basic support prices are set at Agenda 2000 nominal levels for most commodities, and the land set-aside is assumed at the default rate of 10 percent.

Due to a weak euro assumed in the baseline, projected domestic and world prices indicate that EU wheat and barley can be exported without subsidy throughout the projections (see EU box, page 99). Exports of other coarse grains, predominantly rye and oats, continue to require subsidies for exports. However, they are less constrained by the Uruguay Round subsidized export limits because barley exports, which also fall under the WTO limits for coarse grains, are unsubsidized, thereby allowing greater use of subsidies for the other coarse grains. (Note: the WTO-mandated limit on coarse grain export subsidies is applied to the aggregate rather than on individual coarse grains.)

Despite the anticipated ability to export wheat and barley without subsidies throughout the projection period, abundant grain stocks and falling internal grain prices (via Agenda 2000 reforms) combine to reduce the relative cost of feeding grains versus soybean meal. As a result, increases in grain feeding, partly from stocks, are expected to cut EU soybean meal consumption. Consequently, EU imports of soybeans and soybean meal are projected to decline.

Imports of coarse grains reflect the EU’s market access commitments for corn, while imports of other coarse grains are minimal. Beef exports are projected to remain at or below WTO-mandated limits on subsidized exports. Subsidized exports of pork and poultry are dictated by WTO commitments, while unsubsidized exports are projected to increase slightly.

The baseline assumes that there will be no enlargement of the EU-15 to add one or more of the Central or East European countries during the projection period. Accession of the larger agricultural-producing countries could cause serious problems for the EU’s Common Agricultural Policy in its current form, providing impetus for policy changes to further reduce levels of price and budget support below those implied by the current projections.

Asia and Oceania

Australia. Production for export dominates Australian agriculture. Australian producers are expected to continue to adjust cropping patterns, and to switch between crop and livestock enterprises, to maximize returns. With increasing populations and incomes forecast globally, exports and production of the major commodities are forecast to continue to expand. Key issues in the outlook for production are the response of producers to uncertainties regarding price variability and the availability of water. Until more irrigated area is available, area expansion will be slow for some crops. Under water reforms introduced in 1994, each state is required to allocate water to the environment, which is likely to reduce the volume of water available for agriculture. However, the effect on production may be significantly offset by improved

European Union: Agricultural Sector Impacts of Euro Exchange Rates

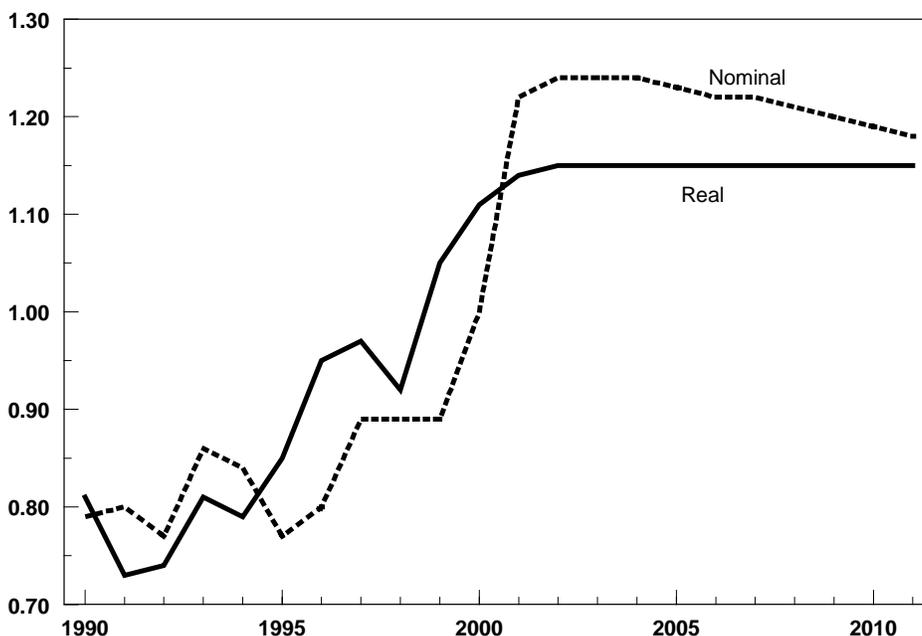
The euro was first introduced as a unit of currency on January 1, 1999, in 11 of the 15 countries that make up the European Union. Exchange rates were fixed between the national currencies and the euro, and monetary policy was placed under the control of a single European Central Bank. The actual euro coins and bills will be distributed beginning in 2002; at which time the national currencies will be taken out of circulation.

The value of the euro relative to currencies of other countries is important for determining the EU's agricultural trade. Since its introduction, the euro has fallen dramatically in value relative to a dollar (Figure 2). At the introduction of the euro, a dollar was worth 0.83 euro, but by mid-1999 was worth just under 1 euro. By October 2000 the dollar had risen to 1.16 euro. In light of expectations that Europe's economic gains will continue to lag behind U.S. growth, the baseline assumes that the euro will continue to decline in value relative to the dollar through 2003/04 and then remain constant for the rest of the baseline.

Under these exchange rate assumptions, the EU is able to export both wheat and barley without subsidies throughout the baseline period. As a result, the EU is able to continue as the world's leading exporter of barley. In addition, the EU also captures the second-largest share of world wheat trade (behind the United States) early in the baseline period and retains it through 2010.

The exchange rate assumption of a strong dollar relative to the euro also increases EU competitiveness in international markets for high-valued agricultural products, such as processed foods.

Figure 2
Euro - U.S. dollar exchange rates, history and baseline assumptions
Euro per U.S. dollar



efficiency of water use, water-saving technologies, and trade in water entitlements. Also, several new dams are in the planning stage.

Cotton yields remain nearly flat over the projection period. Although cotton is expected to continue providing higher returns than competing field crops, production and export growth are projected to show only moderate gains, as they remain heavily dependent on the availability of irrigation water. Cotton plantings could expand in a number of regions, particularly around St. George and Dirranbandi in Queensland and the Lachlan Valley in New South Wales. Expansion in dryland cotton acreage will continue to depend on suitable seasonal conditions and expected returns relative to competing enterprises such as sorghum and livestock production. Australia is projected to continue exporting about 93 percent of its annual cotton production.

Modest growth in wheat area and yields is projected to support increases in both exports and domestic feeding of wheat. Wheat exports average about a 74- to 75-percent share of production over the period; wheat feeding averages a 15-percent share. Australia also continues to export most of its rice production (averaging 65 to 66 percent of production) through the projection period, much of it destined for the high-priced Japanese market, and is developing varieties specifically for that market. However, further growth in rice exports will be very limited due to constraints on increasing both yield and irrigated area. Barley output is expected to show only incremental growth as declining area offsets yield gains. The share of barley area and exports devoted to malting barley continues to rise. Low prices and more favorable returns for other enterprises result in projected flat growth of the cattle herd, and subsequently for beef production and exports.

China. China's economic growth has consistently been the strongest in Asia for some time. However, growth in China is expected to level off from the double-digit gains of the early 1990s to a more sustainable pace of 7.5 to 8.5 percent over the next decade. Future real output gains will be slowed by China's structural adjustment problems, particularly rising unemployment as privatization of state-owned enterprises accelerates. Nonetheless, with projected population growth of 0.7 to 0.8 percent per year, per capita GDP gains will average an impressive 6.5 to 7.5 percent annually. These gains will penetrate China's poor inner provinces and likely improve productivity in the agricultural sector as more capital-intensive farming and food processing is undertaken. In addition, China is expected to gradually move into more labor-intensive crops, such as high-valued fruit and vegetables, which better match its underlying resource endowments.

China's long-term food supply and demand prospects are for rising agricultural production, but also sustained growth in income-driven demand for meats and edible oils and derived demand for feed grains. China's future per capita consumption of food grains is projected to decline due to falling urban demand for wheat and rice, falling rural demand for rice, and only modest growth in rural wheat demand.

The vast majority of China's future food needs will be met through domestic production. Domestic crop production is projected to increase, primarily via yield growth, as recent policy changes reduce incentives to maximize planted area and output of low-quality grain (see China policy box, page 102). Although grain and cotton area are expected to decline in the short term,

over the longer term, area and yield gains and production growth are expected to be modest but steady. More government investment in agricultural research and development and in agriculture infrastructure, such as irrigation and flood control, will be driving forces in reducing costs and increasing returns to farmers. In addition, production of most major crops is expected to rise as yields are boosted by more use of improved varieties and better management.

China's agricultural trade system is assumed to continue a gradual long-term trend of liberalization as the government attempts to reduce swelling financial outlays supporting the inefficient government-owned agricultural marketing and distribution system. The central government will maintain quotas for trade in key commodities, including wheat, rice, corn, and cotton. The share of trade handled by private, quasi-private, or even joint public-private trade companies is expected to expand gradually. Trade in other agricultural commodities will also be strongly influenced by government policy, but generally only through measures such as licensing, tariffs, and taxes.

The net result of recent agricultural and trade policy changes, combined with somewhat slower growth in domestic demand and rising yields, is a projection of moderate growth in imports of key agricultural commodities. Net imports of wheat, barley, cotton, soybeans, soybean oil, soybean meal, and palm oil grow steadily through the projection period, while China becomes a net corn importer late in the baseline. Assuming normal weather and a relatively stable domestic policy environment, China's agricultural commodity imports are not expected to tax the supply capacity of world markets.

The baseline projections assume that China is not a member of WTO during the projections period. However, the November 1999 agreement between the United States and China on China's accession to WTO suggests that China could become a member in the near future. An initial assessment of implications of the accession agreement is available at <http://www.ers.usda.gov/briefing/wto/China.htm>.

East Asia. Agricultural trade in this region remains heavily dependent on feed-livestock interactions and each country's willingness (or lack thereof) to look to international markets to help meet demand. International trade commitments dictated by the Uruguay Round agreement play a major role in determining agricultural trade levels in Japan and South Korea. Without these trade commitments, agricultural imports would be significantly smaller as all three countries retain trade barriers that are highly protective of their domestic agricultural sectors.

Japan is assumed to keep its Uruguay Round levels of tariff and quota protection in effect in 2000 through the remainder of the projection period. In South Korea, import barriers continue to fall through 2004, as dictated by the Uruguay Round agreement. Although the timing of Taiwan's entry into the WTO remains highly uncertain (and linked strongly to China's entry), Taiwan has already adhered to agreed-upon trade commitments in advance of its entry.

In Japan, one of the world's highest-priced import markets, imports of meats will grow because of both demand growth and supply declines. Japan's capacity to expand its livestock production to meet demand growth is limited due to population density and problems associated with odor and waste management. Japan's imports of poultry, pork, and beef are all expected to show

China: Agricultural and Trade Policy Assumptions

Despite important market reforms over the past decade, government policy remains a key determinant of China's agricultural trade levels and overall agricultural direction. The focus of China's domestic policy is narrowly centered on the food grain sector and on maintaining domestic self-sufficiency for most agricultural commodities, generally restricting imports to be less than 5 percent of consumption. Government administrative and financial support is expected to continue to emphasize maintaining sufficient domestic wheat, rice, corn, and vegetable oil output and limiting the need for imports. This is expected to come at the expense of support for other commodities.

Rural and inland poverty remains a serious concern for policy makers and international lending agencies. Distribution of food across China is improving, although a significant imbalance continues to exist between urban and rural areas and between coastal and inland regions. Government purchase, distribution, and stockholding of food grains is expected to continue to account for a significant portion (15-30 percent) of grain production. In addition to poverty alleviation programs, the central government intervenes to promote stability in domestic grain markets. Also, government concern for maintaining rural incomes, particularly farm household incomes, through supporting grain prices is expected to limit the pace and extent of further reform in the agricultural sector.

Over the next decade, the government's goal is to maintain stable domestic consumer food prices while striving for rising rural incomes. Reliance on state-managed agricultural trade via state trading companies and unannounced import (and export) quotas for wheat, rice, corn, and cotton will continue to be the primary factors governing China's major bulk agricultural commodity trade. To a lesser extent, trade in other agricultural commodities, e.g., soybeans and soybean products, will also be influenced by government policy, but through licenses, export taxes, value-added taxes, tariffs, and other mechanisms rather than through quotas or state trading.

Within this general policy focus, commodity-specific provisions of China's agricultural policy have fluctuated dramatically in recent years, generally in response to changes in current supply and demand conditions. However, a principal mechanism that the government has consistently used to promote cereal production has been fixed quota purchases.

Recent Policy Reversals. After pushing responsibility for insuring adequate grain supplies down to the provinces (the "Governor's Grain Bag" System) in the mid-1990s, a "Grain Reform" policy was initiated in 1998 reversing several years of liberalization by severely restricting private grain marketing. These two policy initiatives, combined with excellent weather and a slowdown in consumer demand, resulted in rapid growth in government expenditures and burgeoning agricultural commodity stocks. In the 2 years since, agricultural imports have fallen dramatically and exports have risen.

Grain Policy. In 1999, the government began responding to the growing government stocks by announcing strict new quality standards on government grain purchases and the gradual elimination of purchases of the lowest quality grains. Beginning in 2000, government support prices and fixed quota purchases were eliminated for spring wheat produced in Inner Mongolia, northern Hebei,

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China: Agricultural and Trade Policy Assumptions--continued

Heilongjiang, Jilin, and Liaoning provinces, for low-quality winter wheat produced in provinces south of the Yangtze River, and for low-quality early indica rice. Reduced government purchases and elimination of low-quality purchases represent immediate cutbacks in demand, diminish planting incentives, and ultimately reduce supply. In the near term, large stocks are believed to be sufficient to forestall the need to significantly increase grain imports. In the longer run, a reduced grain supply implies higher domestic free market prices, greater incentive to produce higher quality grains, and possibly larger imports. China's wheat imports are projected at nearly 4 million tons by 2010/11. China is expected to remain an important net exporter of 3-4 million tons of rice annually as its large exports of short-grain japonica and low-quality long-grain indica rice easily exceed its growing imports of high-quality long-grain indica rice.

Cotton Policy. In a significant break from the past, China began the 1999/2000-crop year with no official cotton procurement price, instead letting market conditions determine prices and ending the long-standing state-monopolized cotton purchase and sale system. Years of mounting cotton surpluses and growing textile industry losses finally compelled the government to liberalize the cotton sector. The key provisions of the reforms were implemented on September 1, 1999, for the 1999/2000-crop year. However, it is unclear how much competition will ultimately be allowed in the domestic market because individual cotton merchants and uncertified mills will continue to be officially prohibited from buying, processing, or operating cotton-related businesses. Furthermore, the government will continue to have an active role in the country's cotton trade.

If all of the reforms envisioned for China's cotton sector are implemented successfully, China will have a drastically different domestic cotton market. In the immediate future, cotton farmers are likely to suffer falling prices and decreased incomes. Lower cotton prices are expected to increase the competitiveness of China's textile exports. Lower prices may also increase domestic consumption, as lower costs mean cotton is better able to compete with synthetic fiber. The legalization of alternatives to the government's official cotton procurement system could introduce profound changes in the distribution of China's cotton. These and other long-range impacts of the reforms, however, hinge on the successful implementation of the reform program. China's net cotton imports are expected to begin early in the projection and grow throughout the rest of the baseline.

Soybean Complex Policy. Over the last several years, China's soy complex trade has seen a dramatic swing from large state-sanctioned imports of soybean meal and soybean oil to importing enormous quantities of soybeans. The large soybean meal and oil imports of the mid-1990s contributed to soft domestic prices that squeezed margins for China's growing oilseed crushing facilities. The government responded in 1999 and 2000 by resuming value-added taxes on oil and meal imports, and clamping down on edible oil import smuggling to support domestic crush facilities. Strong domestic demand for oil and meal then prompted the government to increase soybean imports—reaching a record 9 million tons in 1999/00 and an estimated 7 million tons in 2000/01. Over the long-term, this policy shift is expected to have only a marginal effect on China's oilseed and products trade as inefficiencies in China's domestic crushing sector are likely to limit their long-term competitiveness. As a result, continued strong import growth is expected for oilseeds (soybean and rapeseed), as well as soybean meal and edible oils.

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China: Agricultural and Trade Policy Assumptions--continued

Meat Policy. Government policy favors restricting meat imports in preference to domestic production, accomplished through high meat import tariffs and a restrictive import-licensing regime. As a result, China is not projected to be a significant importer of beef and pork over the next decade despite strong income growth and subsequent meat demand growth. China's poultry imports are projected to grow steadily through 2010. However, the preference for domestic meat production is expected to result in rising domestic corn consumption to feed the growing livestock numbers. China is projected to shift from being a net corn exporter to a net importer roughly midway through the projection period. China is expected to continue to export 2-3 million tons of corn to East and Southeast Asia throughout the entire period compared with corn imports of over 7 million tons by the end of the baseline.

Research and Development Policy. The forecast assumes that the central government's recent multi-year commitment to a policy of real annual increases in agricultural research and technology investment funding continues throughout the projection period. As a result, China's agricultural yield growth is expected to increase slowly but steadily as new technologies are introduced. Important constraints to yield growth are limited, and in some areas declining, water resources. In the face of limited data, the projections assume slowly rising yields as China successfully manages its limited water resources throughout the projection period.

Policy-Related Trade Effects. Despite the negative impacts the market-specific policy changes may have on grain and cotton prices and output in the near term, the new policy is not expected to significantly boost imports for three reasons:

- First, the main impetus for the new policy is China's enormous stockpile of grain and the consequent financial burden on central and provincial budgets. A gradual drawing down of those stocks is expected to more than offset any decline in grain output, moderate consumer prices, and prevent significant impacts on import demand. This scenario hinges on the assumption that the central government allows the sale of grain stores at current prices, which are significantly lower than the original purchase prices. There is a great deal of resistance on the part of the central government to incur these financial losses. However, opposition to releasing stocks at prices below cost is weakening as carrying costs grow relative to the one-time cost of selling stocks at a loss. The principle effects of drawing down stocks are reduced imports of wheat, rice, and corn and an increase in corn exports, particularly sales from Northeast China to South Korea and Southeast Asia.
- Second, the economic growth forecast for China is now less optimistic than in previous projections. A sustained slowdown in domestic demand growth, combined with intractable structural problems in the financial and state-owned industry sectors, are expected to slow growth in income and agricultural product demand compared with earlier projections.
- Third, China increased government investment in agricultural research, development, and infrastructure during the mid- and late-1990s. Although there is a significant time lag before increases in investment have an impact on crop yields, this new investment is expected to boost China's long-term crop yield growth higher than in earlier projections.

steady annual growth rates of 2 percent or more per year and will provide stability and strength to world meat markets. However, declining domestic meat production is expected to reduce imports of feed grains and protein meals by about 4 percent through 2010/11.

In South Korea, the government wants the nation to be an exporter of both poultry and pork, and to maintain as much domestic beef production as possible. Structural change and the weakness of the won have strengthened pork and poultry meat production in the short run. Korea is expected to resume pork exports to Japan by the middle of the projections, although trade will not exceed the levels reached in the late 1990s. However, as in Japan, Korea's dense population and relatively small land base for agriculture limits the size of intensive animal feeding operations. A shortage of pasture and forage limits cow-calf operations, effectively providing a bottleneck to any increase in the beef cattle herd. In addition, growing imports, spurred by the liberalization of trade, provide important competition and will limit Korean farmers' ability to expand production. Growth in domestic meat consumption, driven by expected growth in incomes and declining real meat prices, will lead to steadily rising imports of poultry, pork, and beef throughout the projection period. However, long-run prospects for feed imports indicate little growth due to the inability to expand domestic meat production.

Taiwan's livestock sector has been deeply affected by liberalization accompanying its WTO membership application, and by the lingering effects of the 1997 outbreak of foot-and-mouth disease (FMD) on its huge hog farms. In advance of its entry into the WTO, Taiwan's volume of imports for certain formerly banned animal items (offal, chicken meat, and pork bellies) has already reached the levels agreed upon for the first year of its WTO accession under various bilateral WTO market access agreements with WTO member countries. The increased competition caused by imports of these animal products will intensify the current structural adjustment in Taiwan's hog and poultry industries.

The outbreak of FMD in March 1997 has completely shut down Taiwan's pork exports and forced Taiwan to cull about one-third of its hog population. Exports of uncooked pork are not expected to resume for a few years, and even then they will show only gradual growth. With a strong poultry industry and a very large domestic demand for pork, however, livestock production is projected to recover gradually from the FMD shock even though Taiwan will still be out of Japan's raw pork market for a couple of years. Feed grain and protein meal consumption and imports, though much smaller than the pre-FMD levels, are projected to recover and grow gradually.

All three East Asian economies are assumed to maintain tight state control over rice trade. Japan and South Korea will continue to meet their minimum access commitments, but will not import above those levels. The tariff levels for over-quota rice imports announced by Japan provide an economic barrier to significant additional trade.

Food grain consumption has flattened out in the maturing markets of Japan, South Korea, and Taiwan. Vegetable oil consumption is expected to increase modestly. However, vegetable oil tariffs give a preference for oilseed imports for domestic crushing. In Japan, the major oilseeds for crushing will continue to be soybeans and canola, which will compete on the basis of prices in the meal and oil markets. Palm oil imports into Japan will show some growth because of food

processing needs. In Korea, a near-zero tariff on soybeans encourages their importation. However, soybean crushing in Korea has been put under pressure by the lowering of tariffs on vegetable oil imports, which will continue. Nearly one-third of Korea's soybean oil consumption was imported in 1998 and 1999, with further growth expected.

The projections assume that East Asian governments will continue enormous expenditures to help domestic agriculture restructure itself. A continued outflow of labor from farming will help full-time farmers achieve larger operations and economies of size.

Southeast Asia. The Asian financial crisis resulted in exchange rate instability and slowed economic growth throughout Southeast Asia during 1997-1999. Three years after the Asian financial crisis, the crisis countries, including Indonesia, Malaysia, Philippines, and Thailand, appear to have recovered more rapidly than at first anticipated. Positive GDP growth rates have returned to most countries of the region. However, average growth rates during the baseline period are expected to remain 1-2 percentage points below historical averages.

Southeast Asia's feed-livestock sector was dealt a severe setback by the financial crisis. Meat production and consumption (as well as feed grain and protein meal consumption and imports) have now begun to recover from, in some cases, sharply reduced levels. Broiler, pork, and egg production are expected to continue to grow quickly, fueled by rising consumer demand over the longer term. Although local feed production is likely to respond to rising demand, most of the region's economies have limited capacities to produce feed energy and protein. Increasingly, corn is not the only feed grain used, but must compete with feed wheat in nearly all Southeast Asian countries, with cassava and broken rice in Thailand, and with sorghum in the Philippines. Relative prices are critical in determining their shares of feed use. Soybean meal use prospects are also linked to the expectations of further growth in animal feeding in the region. Indonesia, Malaysia, the Philippines, Thailand, and Vietnam are all projected to show strong long-term growth in import demand for coarse grain and protein meal.

Rice imports in the region are expected to continue to expand, as production in importing countries, such as Indonesia, the Philippines, and Malaysia, remains handicapped by land constraints and slow increases in yields. Although wheat import demand in the region has been slowed in the near term by smaller incomes, higher local currency prices, and Indonesia's elimination of its consumer subsidy, longer-term prospects are still for strong import growth as wheat continues to account for a growing share of diets in the region.

The impacts of the crisis on the region's agricultural exports, including rice, palm oil, and poultry, are mixed. With their devalued currencies, Thailand and Vietnam are expected to remain large and very competitive rice exporters, and Thailand's exports of poultry continue to receive a competitive boost from devaluation of the baht.

Exportable supplies of palm oil from Malaysia and Indonesia are enormous and continue to depress the world vegetable oil market well into the projection period as new generations of palm tree cohorts begin to produce for the market. The financial and political instability in Indonesia during the 1997-2000 period has resulted in slight reductions in palm oil plantings and

contributes to long-term uncertainty; but the effect on long-term exportable supplies will likely be negligible.

South Asia. India's strong economic growth, about 6 percent per year over the projections period, provides a springboard for demand-driven agricultural growth. In addition, the agricultural sector is responding to the lifting of licensing and quota restrictions on agricultural imports and exports in response to WTO commitments, as well as to an increased emphasis on export expansion as a source of growth. Although India has replaced quotas with high tariffs, the country is moving incrementally toward open trade and greater integration with the global market.

The farm sector has also benefited from improving terms of trade as liberalizing reforms have steadily reduced protection in non-farm sectors, while agricultural price incentives have been maintained. The pace of reforms is likely to continue under the current government. More emphasis is expected on improving domestic market institutions and competitiveness in the world market, as well as on trade liberalization and incentives for private sector participation.

India's vegetable oil demand is projected to grow rapidly, spurred by increases in population, higher incomes, more liberal import policies, and low internal prices. Also a strong dietary preference for meals cooked with oils influences demand. As a result of this demand pull, India's oilseed production has doubled in the past decade and is expected to continue to expand. However, production falls far short of meeting vegetable oil demand. Since 1997, India's vegetable oil imports have surged to between 4-5 million tons annually, placing India as the world's foremost importer. With the tariffication of vegetable oil trade remaining in place, vegetable oil imports are projected to remain strong throughout the period. Import demand will also be boosted by lower domestic consumer prices for vegetable oil, as well as slowed growth in domestic oilseed production. Palmolein imports from nearby Malaysia and Indonesia have dominated India's vegetable oil imports in recent years, but high tariffication on refined vegetable oils are expected to boost crude soybean oil imports.

India's exports of soybean meal are expected to continue to grow, as soybean producer incentives are less affected than other oilseeds by lower internal oil prices, but export growth will be slowed by area constraints and rising domestic feed demand. Price incentives and productivity gains are expected to sustain strong growth in cotton production, with most production consumed domestically to meet domestic and export demand for cotton-based products.

Food grain production has received a boost from government price incentives, and is also likely to benefit from the reduced protection of oilseeds resulting from the tariffication of vegetable oil imports. Surpluses of rice are projected to continue in the baseline, with India's relatively low-quality rice maintaining its price competitiveness and a significant global market share. The current large domestic surpluses of wheat (much of it low quality), created in part by above-market administered prices, however, are not exportable without subsidy under current world market conditions. Despite the surpluses held in northern areas, high domestic prices have led to wheat imports into southern ports. While some wheat imports are projected to continue, it is

assumed that the government will gradually adjust administered prices to balance domestic supply and demand.

Pakistan is projected to have economic growth of about 4 percent a year, the weakest among the major economies of South Asia. This reflects declining capital inflows, chronic budget deficits, and continued low rates of domestic savings and investment. Political turmoil and the persistent Kashmir problem continue to impact the economy negatively.

Pakistan's wheat production has increased recently due to government price incentives and timely planting, which cut back wheat imports. However, it is unlikely that this trend can be sustained given the expectation that agricultural policy will continue to support gains in cotton area and yields. As a result, wheat yields are likely to remain below potential due to late planting on land that is double cropped with first-crop cotton. Dependence on imported wheat is thus projected to continue.

Pakistan's cotton yields are expected to recover gradually from pest-related problems. As with India, most cotton production is likely to be processed domestically, contributing to strong growth in exports of cotton-based products. Small increases in rice area will allow rice exports to slowly expand. Relatively liberal import policies, combined with limited production potential, will likely lead to continued growth in vegetable oil imports. Growing livestock product demand is expected to lead to growing soybean meal imports and the emergence of small amounts of feed corn imports during the baseline.

Bangladesh continues to maintain moderate economic growth near 5 percent over the projection period. Grain production increases will cut back the levels of rice and wheat imports. Cotton imports are expected to rise because of high demand from the export-oriented garment industries.

Africa and the Middle East

Sub-Saharan Africa. Sub-Saharan Africa's per capita GDP is expected to grow at a small, but positive rate (0.3 percent a year) over the projection period compared with a small average annual decline during the 1985-1999 period. This modest reversal represents a significant departure from previous depressed economic conditions. However, a high population growth rate (2.6 percent) and political and social problems in the several of the region's largest countries (e.g., Nigeria and Congo) continue to prevent stronger growth.

Growth in Sub-Saharan Africa's food grain production is projected at about 2.4 percent annually, just short of anticipated annual population growth. The region's food grain imports are linked to the global availability of food aid and movements in international commodity prices. Food grain imports are projected to grow about 1.4 percent per year, rising from their current level of less than 13 million tons to 14.5 million tons in 2010/11. With these supply projections, total food grain consumption will rise at an annual rate of about 2.2 percent, implying about a 0.5-percent annual decline in per capita consumption of cereals.

Global food aid is assumed in the baseline to remain fairly stable over the projection period. However, it is assumed that Sub-Saharan Africa receives a rising share of global food aid

donations over time because the region is recognized as the most vulnerable with respect to food security. By 2010/11, the region's share of global food aid is projected at about 40 percent.

Despite the importance of food aid to the region, food aid imports remain a small share of total grain imports. Commercial purchases currently account for about 80 percent of Sub-Saharan Africa's food grain imports, and this share is projected to remain steady over the projection period.

North Africa. Growth in import demand for grains, feeds, and oils is projected to strengthen during 2000-2010, based on the outlook for improved economic growth, limited arable land, small farm size, limited use of modern production techniques, and the lingering after-effects of recent severe droughts in several of the countries. Further progress with trade liberalization and privatization programs, as well as other specific economic reforms in individual countries of the region, are expected to help sustain economic growth. The region's GDP is projected to grow at a rate of 4 to 5 percent over the projection period.

In Egypt, recent economic reforms have helped improve the long-term outlook. Government investment expenditures were cut in late 2000 to curb the budget deficit. Inflation and interbank interest rates decreased, and the net international foreign reserve improved. The Central Bank decided to float the pound after having been pegged to the U.S. dollar since 1974, effectively depreciating the overvalued currency. As a result, Egypt's competitiveness in international markets is expected to improve, encouraging exports, curbing imports, and perhaps even boosting the tourism sector. However, Egypt has a long way to go to complete the structural transformation of its economy. Movement towards lower tariffs and a more uniform tariff structure is needed. The acceleration of privatization programs in textiles, the oil sector, and the country's banks would revitalize the investment climate and help maintain the momentum of economic growth. Further progress is also needed in raising national savings and investment to sustain the higher economic growth, reduce unemployment, and improve gains in living standards.

Egypt's real GDP growth is projected at 4 to 5 percent annually during the baseline. Rising consumer demand and recent policy reforms are expected to generate more growth in wheat, corn, and soybean imports. Steadily increasing corn imports are projected in response to the booming poultry and livestock sectors, and to growing demand for starch and sweeteners. Soybean imports are expected to expand rapidly due to the startup, after several years of delay, of a new private soybean crushing facility in Alexandria in 2001. Consequently, growth in imports of soybean meal is expected to slow. Rice area is up sharply since 1998, mostly due to a shift out of cotton, boosting rice exports to more than 500,000 tons early in the baseline. Rice area is expected to increase slightly over the period, thereby maintaining exports in excess of 500,000 tons.

Algeria's GDP is expected to grow at a 3 to 4 percent annual rate over the period. The country's economic outlook has improved mainly due to higher oil and gas prices, political stability ending eight years of civil war, and the election of a new President in April 1999. Revenues from petroleum exports improve the country's trade surplus, foreign exchange reserves, and the flows of foreign investment. Nonetheless, further structural reforms and trade liberalization are needed

to move the Algerian economy to higher growth. Imports of wheat, barley, and corn are projected to rise over the projection period as growth in demand for food and feed grains continues to outpace domestic production.

Morocco's reform measures, including privatization programs and liberalization of the economy and trade, and successful political transition continue to stabilize and improve the economy. Morocco's inflation is expected to stabilize at an annual rate of around 3 percent. Real GDP growth, forecast between 4 and 5 percent annually, coupled with a continuation of government reforms and recent steps to liberalize trade, are expected to drive strong growth in imports of grains, oilseeds, and sugar.

Morocco is self sufficient in fruits, milk, and meat, but imports, on average, one third of its cereal consumption and half of its sugar consumption. Moroccan agriculture still depends substantially on rainfall as less than 15 percent of land is irrigated. The sector suffers from many impediments such as small farm size, access to credit, land tenure problems, and minimal use of modern production techniques. As a result, domestic production is unable to meet growing domestic demand.

In the near term, Morocco's agricultural imports have been restrained by a weak currency and limited foreign exchange. Morocco's currency is linked to the euro, which is expected to continue to depreciate against the U.S. dollar early in the period before stabilizing. In addition, Morocco's trade balance has been negatively affected by a decline in its phosphate exports and an increase in the cost of its gas and petroleum imports. As these patterns reverse themselves later in the baseline, agricultural imports are expected to strengthen.

Tunisia is expected to continue to have strong economic growth during the baseline period, backed by strong investment, slowing inflation (under 3 percent by the end of the projection period), increasing privatization to open the economy for foreign competition, and continuing reforms in the banking, telecommunications, and transport sectors. A member of the WTO, Tunisia has also signed a Free Trade Zone agreement with the EU to gradually eliminate tariffs by 2008.

In 2000, Tunisia's agricultural sector suffered from drought, increasing forecasts of near-term import demand for wheat, feed grains, and vegetable oils. Longer term, Tunisia's projected annual real GDP growth of 5 to 6 percent is expected to boost import demand for wheat, feed grains, soybean oil, sunflower oil, refined sugar, and livestock products.

Middle East. Macroeconomic performance in the Middle East region continues to strengthen with the global economy and high oil prices. The region's economies are projected to experience moderate economic growth during 2000-2010, somewhat higher than occurred during the 1980s. Real annual GDP growth is projected at 4 percent while population growth is still around 2 percent. As a result, annual per capita GDP growth in the region is expected to average only about 2 percent during the period. The region's economic performance will, however, remain strongly tied to the typically uncertain outlook for petroleum export earnings.

Projections for Iran assume a continual movement towards integration into the world economy. Prospects for Iran's economy remain highly dependent on both oil prices and the implementation of structural reforms. Real per capita annual GDP growth is projected at a strong 2 percent for the period, driving increases in demand for meat. Growth in the livestock sectors, while sufficient to meet domestic demand, will increase demand for corn, barley, and soybean meal imports, as domestic grain and oilseed production potential is limited. Per capita wheat consumption is likely to decline with higher incomes, although import demand will continue to rise because of strong population growth and constraints on domestic production.

The political and economic situation in Iraq remains murky. Recent increases in oil export revenues have led to rising imports of wheat, rice, and other foodstuffs. The economy is assumed to maintain a moderate recovery path with 5-percent annual GDP growth. With a continued rebound in consumer demand and petroleum export revenues, food consumption is projected to expand from the lows of the early 1990s toward the higher levels achieved in the mid-1980s. Iraq's livestock sector has begun to recover. Among the meats, production of poultry is rising the fastest, with output growth at almost 5 percent yearly, and per capita consumption growing at more than 2 percent. Rising poultry production is projected to stimulate imports of corn and feed protein, neither of which Iraq produces in large quantities.

Saudi Arabia's economy continues to be heavily dependent on the performance of the petroleum export sector. The recent strong recovery in oil prices has again postponed structural reforms and privatization. As a result, the Kingdom's economy will continue to be adversely affected by revenue shortfalls and under pressure to reform its policies. With population growth expected to average 3.7 percent per year, per capita income growth is projected to remain below 1 percent per annum. Although stronger than during the early 1990s, Saudi Arabia's projected per capita income growth is well below the Middle Eastern average of 2 percent. High population growth and a large expatriate community will continue to fuel food demand during the projection period. However, concern with the depletion of water resources is expected to constrain grain output. Imports of wheat and rice are projected to rise, as demand growth outpaces production. Continued strong expansion of the livestock sectors is also projected to boost imports of feed grains and oilseed meals.

Turkey's per capita GDP growth is expected to average a robust 3 percent during 2000-2010. However, the economy continues to struggle with high inflation and rising debt. While Turkey's population growth rate is declining, its population is becoming increasingly urbanized, raising demand for livestock and poultry products. Expanding urban areas are encroaching on agricultural land and raising environmental concerns in Turkey. The lack of a strong commitment to privatization and restructuring of the farm sector is expected to affect both agricultural trade and overall economic performance during the projection period. Lack of a coordinated livestock development program portends continued high meat prices. High grain price supports and high import tariffs translate into relatively high domestic grain prices. For the projections, it is assumed that there will be moderate reductions in producer supports and import tariffs for grains, more transmission of world prices into the domestic market, slowed growth in area and production, and rising net grain imports. Turkey's cotton production is expected to continue to rise, particularly in Southeastern Anatolian where the Southeastern Anatolian Project

is expected to gradually expand area, but fail to keep pace with consumption. As a result, Turkey will increase cotton imports throughout the projection period.

Western Hemisphere

Canada. Economic prospects in Canada appear good. The economy is expected to grow at a healthy 3 percent per year through 2010 and inflation is low. The Canadian dollar is assumed to stabilize at a value of 0.64-0.67 U.S. dollars during the baseline period, compared with the even weaker 0.63 U.S. dollar value it experienced in 1998-99. The trade balance and government fiscal health continue to improve.

Depressed agricultural commodity prices of the past two years have strained Canada's agriculture. However, the Canadian government has several programs in place to help support domestic agriculture. These include the Net Income Stabilization Account, Crop Insurance, Companion Programs, and the Advance Payments Program. Wheat and barley in Western Canada continue to receive marketing support from the Canadian Wheat Board, including price pooling. In addition, Canada maintains supply management programs for dairy, eggs, and poultry products and continues to be isolated from world markets for these three commodity groups. The baseline assumes similar levels of support to continue. No changes are assumed to occur in provincial price stabilization programs, particularly for the Quebec hog program. However, Canada's Agricultural Income Disaster Act is treated as a temporary program and does not affect the long-term projection.

Transportation reform continues to affect Canadian agriculture and trade. When freight subsidies were eliminated in 1995, the cost of shipping Prairie Province crops to export positions increased. This reform measure is expected to lower marketing costs and improve the grain marketing system in Canada in the long run. However, the near-term effect has been to pass the lost subsidy through the marketing channel to the farm-gate in the form of lower prices for grains and oilseeds. Prairie processing and livestock sectors have benefited from the reductions in local prices. As a result, the removal of transport subsidies has contributed to a number of important structural changes now shaping the outlook for Canadian agriculture and trade. Valued-added processing and livestock operations have expanded in the Canadian Prairie Provinces. Most notable is the rapid expansion of hog operations, primarily in Manitoba. In addition, canola production and processing has expanded. Livestock operations (feeding, slaughter, and meat packing) and canola (rapeseed) crushing are all projected to continue increasing moderately in the baseline.

Crop production patterns continue to favor canola in Western Canada, as has been the case in the past several years. However, production of dry peas (field peas) has increased significantly since the middle of 1990s and now offers increased competition to protein meal in livestock rations.

Favorable world and U.S. economic prospects over the baseline period will bolster Canada's export prospects. With more investment in livestock facilities, Canada will slaughter more livestock and increase its meat exports, particularly pork.

Canadian agricultural exports depend heavily on the U.S. market, which accounts for a majority of Canada's agricultural and food product exports. Asia is also an important Canadian export destination. Strengthened Asian economies projected in the baseline mean improved export prospects for Canadian wheat and pork in those markets. This also implies higher feed demand and increasing feed imports from the United States.

Mexico. Mexico is expected to show the fastest economic and population growth in North America over the next decade. Per capita real GDP is projected to grow at an annual rate of about 3.5 percent over the period. Relatively fast growth, along with trade liberalization and domestic policy reform, will be the key factors shaping the outlook for Mexican agriculture during 2000-2010. Mexico is expected to be a progressively larger importer of grains, oilseed products, and meats during the projection period. Production capacity will remain limited by scarce water and land and low levels of technology, while rising incomes drive up demand for livestock products and feeds.

In recent years, Mexico has experienced increasing domestic pressure to limit imports, in large part because of continued low internal prices for most agricultural commodities. However, longer-run agricultural policy is expected to continue to be driven by the Alianza para el Campo, of which the PROCAMPO program is a major component, and by NAFTA. Under PROCAMPO, the government continues to reduce its role in supporting grain prices. The reductions in domestic support coupled with stiff competition from imports are expected to reduce area planted to coarse grains and limit wheat area. PROCAMPO direct payments, which require keeping land in an agricultural use but are otherwise decoupled, will continue to be phased out. Mexico is also expected to continue to reduce consumer subsidies.

Under NAFTA, all tariffs on baseline commodities will be eliminated by 2008. Because of the price-competitiveness and quality of U.S. corn, pork, poultry, and eggs, it is assumed that Mexico will import at least the tariff-rate quota quantities. In the case of poultry, it is assumed that Mexico will continue to not enforce the TRQ, leading to steady, modest growth in imports. Also, Mexico's exports of sugar to the United States are expected to rise following tariff elimination.

New programs aimed at improving agricultural productivity are assumed to have a small impact on farm output during the projection period. The new programs include initiatives for water distribution and irrigation investment, improved genetic material and equipment for livestock producers, technology transfer for the cattle and oilseed sectors, certified seed exchange, and an extension initiative for corn. The objective is to provide producers with the tools to operate in an environment largely free of government intervention but, until there is more progress in implementing the programs, it is assumed that impacts will be relatively small.

South America. Although the Asian financial crisis temporarily reduced economic growth rates in South America in 1998-2000, virtually all of the region's economies are expected to register strong economic growth during the next decade. Growth prospects are led by the two largest economies in the region, Brazil and Argentina. Like many countries in South America, they are expected to continue to benefit from their successful evolution from semi-authoritarian political systems and managed economies to political pluralism and more market-oriented economies.

Brazil's agricultural production prospects are extremely favorable in the long-term, and are benefiting from improvements in infrastructure. Improvements in waterway and railroad transportation systems are expected to make more agricultural production accessible to export terminals at prices that are very competitive in international markets.

The conversion of undeveloped land to arable land in Brazil is expected to gain momentum in the next decade, leading to further gains in soybean area and in cultivated pastures to support livestock expansion. In the center-west states of Goais, Mato Grosso, and Mato Grosso do Sul, for example, the potential exists to more than double the soybean area from about 4.9 million hectares in 1998. In the states of Maranhao and Tocantins in north-central Brazil, the potential exists to increase soybean area from only 0.2 million hectares in 1998 to 4-5 million hectares. Such growth would push production from these areas far beyond that of the traditional soybean producing areas in southeastern Brazil. However, infrastructure development remains the key to the pace of agricultural expansion in the vast interior lands.

Area planted to wheat and corn in Brazil is expected to show little or no growth, however, because production in the temperate southeastern areas faces competition from more efficient producing areas in neighboring Argentina and current varieties for these crops are not economical to produce in the tropical setting of the of the country's interior. As a result of limited wheat production growth in the face of strong urbanization and income growth, Brazil's wheat imports are expected to grow at about 1.6 percent annually, reaching 9.1 million tons by 2010. This import level maintains Brazil as the world's leading wheat importer throughout the projection period.

Argentine production potential will continue to expand rapidly over the course of the baseline projection period. In Argentina, future growth will likely manifest itself in the form of higher yields, rather than area expansion. Yields of wheat and corn are still considerably lower than in the United States. However, with continued adoption of higher-yielding plant varieties and more intensive input use, Argentina may rapidly close this gap.

Livestock dynamics will also play a critical role in determining the evolution of Argentina's field crops area. Presently, Argentina's vast permanent pasturelands (estimated at about 142 million hectares in 1999) are principally used to support a "grass-fed" cattle industry. In 1999, less than 10 percent of beef production was finished in feedlots. Some portion of this permanent pasture could be converted to cropland if market signals provide sufficient economic incentives.

Argentina's transportation infrastructure, which has largely been privatized, continues to be upgraded to handle the expanding supply of products more efficiently and at lower costs. Beef and veal production in Argentina grows at a 1.5-percent annual rate during the baseline.

Transition Economies

Former Soviet Union (FSU). The economic crisis that hit Russia in August 1998 also affected other countries in the FSU region (Ukraine, in particular), mainly through capital flight. The main macroeconomic consequence of the crisis for Russia and Ukraine has therefore been

extreme depreciation of the currency. After depreciation in 1998 and 1999, the Russian ruble and Ukrainian hryvna are expected to stabilize in value, and then begin to appreciate in real terms early in the baseline, thereby reversing much of the recent depreciation.

The initial fears that Russia's economic crisis would cause serious declines in GDP in Russia and throughout the FSU region were not realized, as Russian GDP grew 3.2 percent in 1999. The main reason is that the currency depreciation stimulated production by substantially improving the price competitiveness of domestic producers vis-à-vis the world market. As a major oil and natural gas exporter, Russia also benefited from rising world prices for energy. GDP in both Russia and Ukraine is projected to grow throughout the projection period at annual rates of 3.5-4 percent. Agricultural productivity throughout the FSU region is expected to rise only slightly during the next decade. This reflects pessimism that Russia and its FSU neighbors will enact the institutional reforms in agriculture necessary to promote productivity growth.

Russia elected a new legislature (Duma) in December 1999, and new President (Vladimir Putin) in June 2000, while in November 1999, Ukraine re-elected Leonid Kuchma as President. The early policy signs suggest that neither Putin nor the Duma will try to move Russian economic and agricultural policy strongly in either reform direction--that is, they will not accelerate reform but also not try substantially to reverse it. Major policy shifts in Ukraine also are not expected. These points underlie the cautious assumptions about agricultural productivity growth.

The main effect of Russia's crisis on Russian and FSU agricultural trade is that the depreciation in FSU currencies significantly reduced the region's imports by raising the prices of imports relative to domestic output. Agricultural imports are therefore expected to remain depressed in the short to medium term. However, as currencies begin to appreciate in real terms and economic growth picks up early in the baseline, imports are expected to rise. The main U.S. agricultural export to the FSU region during the reform period has been poultry, with most going to Russia. By the end of the projection period, U.S. poultry exports to the FSU region are projected to rebound and exceed the pre-crisis levels.

Central and Eastern Europe (CEE). The CEE region suffered macroeconomic setbacks in 1999 brought on by fallout from financial crisis in Russia and, in the case of the Balkan countries, by the war in Kosovo. Growth in the region has since rebounded and is projected to average 4-5 percent annually through the baseline.

Progress is assumed to continue towards market reform. As the economic transition proceeds, it is assumed that most of the rigidities inherited from the Communist period of central planning will be removed, leading to fuller transmission of world market prices to internal markets. The projections are based on the assumption that most world agricultural commodity prices will be fully transmitted to domestic markets and that import tariffs in most cases will not exceed 30 percent. In the short term, policies throughout the region have kept domestic producer prices near world levels. These measures have tended to counter the downward pressures on prices coming from lingering bottlenecks in the downstream sectors. As a result, it is assumed that domestic producer prices will not differ greatly from world market prices. Pressure to keep state budgets in balance is expected to remain the principal constraint on agricultural policy.

The projections also incorporate an assumption of a steady increase in efficiency in the agricultural sector, reflected in moderate gains in crop yields and greater feeding efficiency in the livestock sector. These productivity increases are expected to result from continuing progress toward market reform in all the CEE countries. Rising incomes and lower interest rates will bring badly needed investment to both agriculture and food processing. There will likely be some consolidation of the small fragmented farms that currently dominate much of the landscape. It is anticipated that land tenure will become more permanent, bottlenecks in issuing titles will be resolved, and true land markets will develop as capital markets improve.

The baseline assumes that none of the CEE countries will join the EU during the projection period. The EU has now agreed to open negotiations for accession with all the CEE nations. Although some CEE countries may join the EU by 2003, the timing and terms of accession are uncertain. When CEE countries do accede to the EU, significant changes in domestic and trade policies from those assumed here are likely.

Commodity Trade Highlights

Coarse Grains

Demand for coarse grains is expected to grow robustly over the next decade. Coarse grain consumption growth is projected to average 1.8 percent annually, significantly stronger than the 0.8-percent annual growth of the 1990s or the 1.2-percent rate of the 1980s. Projected growth, however, is well below the 7.6-percent annual gain of the 1970s. A key factor that weakened global coarse grain demand over the past decade was the drop in livestock numbers and feeding that occurred in the FSU and CEE as these economies experienced structural reform. With that structural shift now complete, these transition economies are expected to be a source of growth in grain feeding in the next decade.

About two-thirds of global coarse grain supplies are used as animal feed. Coarse grains that are traded are also primarily used as feed. Rising incomes and associated gains in per capita meat consumption, particularly in developing countries, are a key driver of projected increases in coarse grain use and trade. The developing countries of Asia, Latin America, North Africa, and the Middle East are expected to lead world growth in feed grain consumption and trade over the next decade. Industrial uses, such as starch production, ethanol, and malting, are relatively small but growing. Food use of coarse grains is concentrated in parts of Latin America, Africa, and Asia, and has generally declined over time, as consumers tend to shift consumption toward wheat, rice, or other foods as their incomes rise.

Foreign coarse grain production is projected to rise much more rapidly through 2010 than during recent decades. Except for corn, coarse grain area has been falling for decades in most countries, as producers turned to higher priority or more profitable crops. Foreign coarse grain area is expected to stop its decline and expand gradually for the rest of the decade, reaching 280 million hectares by 2010. However, this remains far below the record 306 million hectares reached in 1981. Foreign corn area is expected to continue to increase at the strong pace of recent decades and, with corn yield growth much stronger than for other coarse grains, corn will increasingly dominate feed grain markets. Growing demand and attractive prices for malting barley support

some gains in global barley area. Global sorghum area is projected to continue its long-run decline because of the development of higher yielding, drought-tolerant corn varieties. Other coarse grain area (mostly oats and rye) is expected to increase slowly.

Reversing a period of stagnation that began in the early 1980s, world coarse grain trade is projected to grow over the next decade, expanding 2.6 percent, or about 2.8 million tons, annually from 2001 to 2010. Global coarse grain trade is projected to reach the 1981 record of 108 million tons in 2003 and expand to 131 million tons by 2010. Strong economic growth is expected to fuel higher coarse grain imports in China, North Africa, Southeast Asia, and Latin America. East Asian imports are projected to remain mostly steady, as these countries tend to maintain stable domestic livestock and poultry production, while meat imports satisfy most of the growth in internal demand. Taiwan's and South Korea's feed grain imports are expected to increase slowly, while Japan's decline. Southeast Asian feed grain imports are expected to show strong long-term growth driven by Thailand and Vietnam. After a dip in the first year of the baseline, representing recovery from drought, North Africa and the Middle East imports are also an important source of growth in coarse grain trade. The FSU, one of the world's largest importers during the 1980s, is expected to be a modest net exporter of coarse grains, mostly barley, as animal numbers increase only gradually.

U.S. exports of coarse grains are projected to increase in 2001, despite a slight decline in corn exports, because of an expected recovery in sorghum exports. In 2001, global coarse grain trade increases. Greater export competition from Argentina, Canada, Eastern Europe, and the former Soviet Union partly offsets reduced exports by China and the EU. In 2002, Argentina, Canada, Eastern Europe, and the former Soviet Union are expected to continue to expand exports enough to cause a decline in U.S. coarse grain exports despite continued expanding global trade. U.S. exports stabilize in 2003, as competitors' export growth slows. In 2004 and thereafter, U.S. coarse grain exports expand, but competition remains strong and the U.S. share of global coarse grain trade declines slowly. U.S. market share is expected to decline because rising international prices boost foreign production.

U.S. corn exports are expected to grow an average of about 1 million tons per year over the projections period. The 1979 record level of U.S. corn exports is exceeded in 2007, with corn exports reaching 67.9 million tons by 2010.

World corn trade grows at an increasing rate until the last years of the baseline when increasing prices limit expansion. Global corn trade is expected to exceed the 1989 record of 80 million tons in 2005, reaching 95 million tons by 2010. The largest gains in corn imports are expected to occur in China, Southeast Asia, Latin America, North Africa, and the Middle East, where demand for livestock feed is expected to expand steadily, but production potential is limited. With China reducing corn exports during most of the period, Argentina, Eastern Europe, and the United States will be the major beneficiaries of increasing import demand for corn.

Global barley trade is expected to expand throughout the baseline, although growth early in the period is minimal as North Africa and parts of the Middle East recover from drought. Import growth is expected in China and other malting barley markets. Feed barley imports by Saudi Arabia are expected to expand slowly, but will likely be constrained by limited exporter supplies

and substitution of other feeds. Canada and Australia are expected to expand barley exports in the first years of the period, but the higher profitability of other crops is expected to stall expansion. After an initial decline, EU barley exports are expected to gradually rise through the rest of the baseline and exceed the 2000 record by 2009. The Uruguay Round Agreement limits on subsidized EU coarse grain exports constrain combined exports of barley, rye, and oats. However, in light of a weak euro, projected prices and exchange rates in the baseline indicate that barley can be exported by the EU without subsidy throughout the next 10 years. Thus, the constraint on rye and oats exports becomes less binding as available coarse grain subsidies shift from barley. Global trade in other coarse grains is projected to grow, but the EU is expected to have difficulty finding markets for its large rye stocks.

Sorghum trade is projected to increase gradually through the baseline, driven by Mexico which favors sorghum imports as less politically sensitive than corn. Japan's sorghum imports are expected to stagnate.

Wheat

World use of wheat is projected to grow at an average of 1.4 percent annually between 2000 and 2010, significantly faster than the 0.6-percent annual growth achieved in the 1990s, but still slower than the 1970s or 1980s. Global use grows strongly in the first year of the baseline as North Africa, parts of the Middle East, Eastern Europe, and the former Soviet Union rebound from drought-induced tight supplies. In the latter half of the projections, consumption growth slows to 1.2 percent because of increasing wheat prices. Developing countries account for most of the projected increase in global use. However, the transition economies of the former Soviet Union (FSU) and Central and Eastern Europe (CEE) also show important gains in use, in sharp contrast with the last decade when consumption in the region contracted. Developed countries contribute about 24 percent of expected growth in wheat use. In the United States, total use of wheat is growing sluggishly as increases in food use are driven almost exclusively by very modest population growth. The very slow growth in U.S. domestic use underscores the importance of global trade for future U.S. wheat demand and prices.

World per capita use of wheat and flour is projected to climb slowly from 99 kilograms per year in 2000 to about 100 kilograms by 2010. World per capita use peaked at 107 kilograms in 1990, but then fell to 97 kilograms in 1995 due to the sharp decline in consumption in the FSU and CEE. Global food use is expected to increase at slightly less than the pace of population growth. Substantial increases in wheat feed use are expected in the FSU, China, and the EU, all regions where prices for wheat and competing feed grains are not closely linked to world prices.

World wheat production is projected to increase at between 1.2 and 1.4 percent annually from 2001 to 2010. Global wheat area is projected to show little growth, in part due to higher productivity growth for several competing crops relative to wheat. Instead, most of the growth in global wheat production projected in the baseline comes from increased yields.

World wheat trade (including the wheat equivalent of wheat flour) is projected to grow an average of 2.2 million tons, annually. The projected growth is a reversal of the 1980s and 1990s when trade declined. Growth in imports is concentrated in the developing countries, primarily

North Africa, the Middle East, China, and Indonesia. By the end of the decade, India is projected to join Pakistan as a growing net importer of wheat. Imports by the transition economies of the FSU and CEE are expected to continue to decline during most of the projections, but these declines will not be as globally significant as during the previous two decades.

Although nominal wheat prices are expected to increase over the next 10 years, real wheat prices are projected to decline, limiting incentives to grow wheat for export. Exchange rates are expected to favor some exports. The share of world wheat exports supplied by the EU, CEE, and the FSU is projected to increase over the period, while the export share for Canada, Australia, and Argentina declines. Exports by India, Turkey, and other foreign exporters also contract. The United States is projected to maintain its share of world wheat trade at about 29 percent.

Limits on export subsidies included in the Uruguay Round agreement, Agenda 2000 reforms in the EU, rising wheat prices, and the weak euro assumed in the baseline combine to make export subsidies less important in the future than they have been in the past for determining wheat market shares. However, a portion of budgeted U.S. EEP funds are assumed to be used for wheat starting in 2001/02, so targeted countries receive larger exporter subsidies than in recent years. For the most part, exporter market shares are likely to be determined by the cost effectiveness of wheat production, transportation, and marketing systems. Wheat production and exports in the United States are expected to be limited by the slow growth in wheat yields compared with other crops.

The EU is expected to boost market share significantly the next several years as currency weakness allows EU wheat (and barley) exports to occur without subsidies. Agenda 2000 reforms also lower internal grain prices early in the projection period. However, abundant wheat stocks and limited cropping alternatives will fuel EU wheat exports through 2010. The EU share of world wheat trade is projected to increase from 15 percent in 2000 to nearly 20 percent by 2010. Modest changes in exchange rate assumptions could alter this scenario. Weak exchange rates are also expected to encourage wheat exports from the FSU and CEE.

In Canada, reform of the transportation system has resulted in changes in marketing costs that favor barley production over wheat and thus keep wheat area from expanding. Canada's wheat yield growth was very slow over the last decade and, given varietal constraints, is projected to remain limited for the next decade. As a result, increased domestic demand is expected to limit export growth. In Australia, increasing wool prices and limited areas with enough rainfall will constrain wheat expansion. Argentina is expected to shift area between wheat, corn, and oilseeds, depending on which has the most attractive world price, but total area is limited. Productivity gains for corn are expected to outpace wheat, causing a gradual decline in wheat area.

Rice

Global rice trade is projected to grow slightly less than 2 percent annually from 2000 through 2010. By 2010, global trade is projected to reach 30 million tons, more than 12 percent above the record of 26.8 million set in 1998 and 20 percent above 2001. Projected trade growth is

faster than in the 1980s, but slower than in the 1970s and 1990s. Rice trade as a share of total use remains very small relative to other cereals, despite a projected small increase to almost 7 percent by 2010.

Trade is expected to continue to consist predominantly of long-grain (indica) varieties, which will account for the bulk of the trade growth. Expansion in medium-grain (japonica) trade is projected to be slower, despite the increases since 1995 in medium- and short-grain rice imports by Japan and South Korea under the Uruguay Round Agreement. Asia, the Middle East, and Sub-Saharan Africa are projected to account for the bulk of the import growth.

Nominal prices are expected to rise slowly from recent low levels at a rate slightly greater than the general inflation rate. Global japonica prices are expected to remain above long-grain prices due to limited world exportable supplies of high-quality japonica rice. The bulk of japonica imports are by middle and higher income countries, primarily Japan, South Korea, Turkey, and Jordan. Indica rice is imported by a broad spectrum of countries, with Indonesia, Iran, Iraq, the Philippines, and Latin America the top markets.

Foreign production is projected to rise gradually, growing almost 1 percent per year. Projected growth is slower than in the 1970s, 1980s, and early 1990s when irrigation expanded rapidly in Asia and Green Revolution technology was being widely adopted. Expectations of slower production growth stem primarily from a slowdown in yield increases. Yield growth has slowed since the early 1990s. Expansion in global acreage is expected to remain extremely small, as it has since 1975. India is projected to account for the largest share of expanded rice area and production.

Global rice consumption is projected to rise about 1 percent annually, markedly slower than during the 1980s and the first half of the 1990s. Global per capita consumption is projected to decline over the baseline period, so the expansion in world rice consumption will be driven by population growth. Asia will account for the bulk of the growth in global rice consumption, even though per capita consumption in the region is projected to decline.

Per capita rice consumption in middle and higher income Asian countries has been declining for several years, particularly in Japan, South Korea, and Taiwan, and is expected to continue to decline, reducing total rice consumption in these countries. Higher incomes lead to declines in rice consumption in these countries in favor of other foods, such as wheat products, fruits and vegetables, and meat. Little or no growth in per capita consumption is projected for the largest rice consuming countries in Asia. In China, the world's largest rice consuming country, per capita consumption is projected to continue declining, a result of rising incomes and shifting diets. Even with a rising population, China's total food consumption of rice is projected to decline over the next decade. Per capita growth is projected to be negligible in India, Indonesia, and Bangladesh. However, growing populations will push total rice consumption higher over the next decade in these three major rice-consuming countries.

In contrast, per capita consumption is projected to continue rising in other regions. These are primarily lower income rice producing countries, such as the Philippines, and higher income non-Asian countries, such as Canada, the EU, and the United States. Per capita consumption is

projected to expand slightly in the Middle East and Central and Eastern Europe as well. Per capita consumption in Brazil, the largest non-Asian rice consuming country, is projected to be essentially flat over the next decade, although expanding population will push rice consumption higher.

The United States is a net exporter of rice, shipping high-quality indica and japonica rice to markets worldwide. Both U.S. rice exports and the U.S. share of global rice trade are projected to decline over the next decade. From 1991 to 1995 the U.S. share of the export market for rice varied from 14 percent to 17 percent, but averaged less than 12 percent from 1996 to 2000. It is projected to be 10 percent in 2001 and then slowly decline to slightly less than 6 percent by 2010.

No growth in U.S. production, continued expansion in domestic use, and high U.S. prices relative to Asian competitors are expected to prevent any increase in the volume of U.S. rice exports over the baseline period. By 2010, total U.S. exports are projected at 1.7 million tons, while total imports are expected to rise to 0.4 million tons, leaving the United States a net exporter of only 1.3 million tons of rice. This compares with the estimated 2.8 million tons exported in 1999/00.

Historically, rice trade and prices have exhibited greater volatility than those of other cereals. Much of this volatility stems from a high concentration of global rice production in South and Southeast Asia where production is heavily dependent on the timing and amount of rainfall during the monsoon season. In addition, only a small share (currently about 6 percent) of world rice production is traded each year. These factors will continue to affect the world rice market during the next 10 years, with the potential to create dramatic annual swings in trade and prices that could deviate significantly from the trends projected in this baseline.

Cotton

Growth in foreign consumption and production of cotton both slowed substantially during the 1990s, largely due to difficulties with the transition to market economies in the former Soviet Union and Eastern Europe. Recovery became evident late in the 1990s and is expected to continue during the next decade, although consumption and production are not expected to return to their long-term average growth rate of 1.8 percent per year during the baseline. World cotton consumption is projected to expand approximately 1.2 percent annually during 2000-2010, underpinning the outlook for a rebound in the volume of world cotton trade. However, a key uncertainty in the projection is the extent to which earlier gains in cotton consumption, associated with a shift in consumer fiber preference toward cotton and away from synthetics, can be sustained. Sustained Asian investment in polyester capacity up to the onset of the region's financial reversals suggests vigorous competition for fiber share in coming years. The WTO-mandated end of textile import quotas starting in 2005 also has the potential to significantly transform the global textile industry for all fibers, adding further uncertainty to the outlook.

Foreign cotton production showed little upward trend during the 1990s, as smaller harvests in China and the FSU offset gains elsewhere. High levels of input use and poor water management have rendered useless much of the area abandoned in Central Asia during the 1990s, and this

area is expected to remain out of production during the projection period. Competition from other crops and growing pesticide resistance by major cotton pests hampered production in China, although recently yield growth has resumed. Further losses in these regions are not expected, although production prospects in China, the world's largest cotton producer, are uncertain following extensive policy reforms for cotton during 1999.

World cotton trade is expected to average 1.3-percent annual growth during 2000-2010, reversing much of the decline suffered during the 1990s. World cotton trade fell from a peak of 33.4 million bales in 1988 to 23.8 million in 1998, in large part due to declining Russian imports. China also switched from a large importer to exporter in 1998. The outlook is for import growth in Russia, China, and elsewhere during the forecast period and world exports are projected at 31.3 million bales by 2010.

World trade in the 1990s contracted for two reasons--the virtual collapse of Russia as a consumer and importer of cotton, and the continued shift of spinning from traditional importers to cotton-producing countries. Neither factor is expected to be as important in the future. Russia's cotton consumption fell almost 85 percent between 1989 and 1998 during the restructuring of Russia's political, economic, and foreign trade systems. Elsewhere, other traditional cotton-importing countries found it less expensive to purchase cotton yarn and fabric for their textile industries as inexpensive textile imports flooded their markets, particularly from Pakistan through the early 1990s. At the end of the 1990s, apparel as well as textiles from China, India, and Pakistan played an important role in reducing importers' mill use of cotton fiber, particularly Japan's, and to some extent Korea's and Taiwan's. These textile and apparel imports took the place of imported raw cotton.

With Russian mill consumption beginning to rebound since 1999, and China likely to again become an importer following cotton-sector policy reforms, world cotton trade is likely to grow during the next 10 years. In addition to Russia's return to growth, several countries that were net suppliers to world markets as late as 1990 have become importers instead. In past years, increasing consumption in Mexico, Brazil, and Turkey in part represented shifts in consumption away from importing countries to non-importing producers. As consumption gains have consistently outpaced production in all three countries, they have begun to steadily import, driving world trade higher. Even India and Pakistan became frequent net importers during the second half of the 1990s.

Foreign export growth is expected to recover during 2000-2010, but to remain below the long-term trend. By 2010, foreign exports are expected to total 22.4 million bales. Foreign export growth will be supported by some resumption of trade relations among countries of the FSU, and by growing import demand from China, Latin America, and Southeast Asia.

U.S. exports are also expected to trend up 1.1 percent annually during 2000-2010, growing to near 8.9 million bales by 2010. The U.S. share of world trade is expected to peak in 2002 at almost 30 percent, then decline gradually to about 28 percent by 2010. This is still above its average share of global trade during 1994-2000. U.S. export share was boosted during much of the 1990s by extremely large imports by China and by use of Step 2 of U.S. cotton marketing loan provisions.

While future world consumption is expected to improve compared with the 1990s, the rapid consumption growth of the 1980s, which was spurred by sharp share gains by cotton versus other fibers, is not expected to resume. In the short term, consumption growth by several cotton importers is likely to be constrained by relatively sluggish economic performance and economic restructuring. In the long term, the liberalization of textile trade under the Uruguay Round's Agreement on Textiles and Clothing will also constrain cotton imports by the most developed traditional importers, such as the EU and Japan. In contrast, rapid consumption growth is expected in many developing countries and steady growth in consumption is expected to continue in major cotton-producing countries. The pace of this structural shift will depend on the implementation of the Multi-Fiber Arrangement's phaseout. While it is anticipated that the most significant changes will probably be delayed until the phaseout is complete at the end of 2004, large uncertainties remain about the timing of liberalization and shifts in garment production both to and among developing countries.

Highlights for Major Foreign Cotton Importers. In traditional cotton-importing countries (e.g., Japan, South Korea, Taiwan, and the European Union), cotton consumption is expected to decline steadily. Strong competition from emerging Asian textile suppliers and comparative production disadvantages will accelerate declines in their raw cotton consumption after 2000.

China's consumption is expected to grow more rapidly than production during 2000-2010. While China is forecast to be an exporter over the forecast period, net imports are forecast to resume now that China has reduced its stocks. After first suffering chronic bollworm infestations during the early 1990s, the North China Plain rebounded as a production region during 2000, although it remained far short of its former role as China's pre-eminent growing region. While the Yangtze region's cotton area was much more stable than the North China Plain's during the 1990s, the Yangtze region declined in importance relative to Xinjiang, and China's total area devoted to cotton is expected to remain well below the peaks seen in 1984 and 1992. China's yield growth recovered during the 1990s, but the termination of a government price floor suggests the incentives for maintaining input levels may be smaller during the forecast period.

China's future production and consumption prospects are both subject to considerable uncertainty. Since China is often one of the world's largest importers over some of the projection period, differing assumptions on supply and use developments could significantly influence world trade and U.S. exports. During the course of recent policy reforms, China's cotton prices and farmer enthusiasm have varied widely from year-to-year, and it is unclear where China's initial steps towards the privatization of cotton marketing will take it. Specific areas of uncertainty include the extent to which planted area might return to cotton production after a 5-year, 1.2-million-hectare decline, the extent to which cotton consumption can maintain its initial post-reform surge, and the evolution of agricultural trade policy as China's reforms continue.

In Indonesia and Turkey, consumption and import expansion are expected to resume due to comparatively cheap labor, favorable exchange rates, and foreign investment in their textile industries. Indonesia is expected to be one of the largest importers in the world throughout much

of the forecast period, but Turkey is forecast to surpass Indonesia as the second largest importer in 2002 and replace Mexico as the largest in 2005. Turkey is expected to benefit from continued integration into the EU. Turkey's cotton production is expected to continue to rise, particularly in Southeast Anatolia, but fail to keep pace with consumption.

The integration of textile industries in Mexico and the United States has driven Mexico to become the world's largest importer of raw cotton starting in 2000. Mexico's cotton imports grew about 300 percent between 1994 and 2000, and prospects are good for further, albeit, substantially slower, growth through 2004. The WTO-mandated end of textile import quotas adds uncertainty to Mexico's prospects after 2004 as its preferential access to North American markets erodes, and consumption and import gains are expected to slow further at that point.

Brazil's production rebounded and its imports dipped as cotton production moved north and import tariffs on cotton rose during the second half of the 1990s. Brazil is not expected to return to the import-substitution orientation that governed its economic policy before the 1990s, and cotton import tariffs are likely to remain low, although exceeding their pre-MERCOSUR levels. Consumption is expected to continue outpacing production, but high yields from rapidly expanding area in Matto Grosso will constrain import growth.

After years of plummeting cotton consumption, some FSU countries are beginning to increase consumption again, while CEE consumption continues to lag. For even the most dynamic of the region's traditional importers, cotton consumption and imports are expected to remain well below historic levels throughout 2000-2010. However, Central Asian countries, like Uzbekistan, are likely to consume more cotton than in the past as government policies favor investment in local textile industries.

Demand prospects in the non-cotton-producing republics of the FSU are a major uncertainty in the trade outlook, particularly for Russia. As economies recover in Russia and the other lagging republics, it is not clear if their textile sectors will expand at the same rate as the overall economy, grow faster as a result of promotion aimed at achieving quick gains in export earnings, or suffer due to import competition.

Highlights for Major Foreign Cotton Exporters. Australia and the French-speaking countries of West Africa will continue to channel most of their growing cotton output into the export market throughout the forecast period. There is little prospect of either exporter processing a significant amount of its cotton output domestically, although in the very long run a larger textile industry is likely to develop in Africa.

Pakistan is expected to maintain some regulation of raw cotton exports, favoring domestic producers of products for export over exports of raw cotton. However, restrictions on raw cotton exports are expected to be less severe than before the 1994/95 relaxation, leading to some growth in raw cotton exports, as well as some strengthening of domestic producer and consumer prices with respect to world prices.

The Central Asian countries of the FSU will continue exporting cotton to non-FSU markets at higher levels than during the 1980s. These countries are also expected to increase their exports

within the FSU. Central Asia's ability to export, however, will be heavily dependent on yield gains. Past environmental damage is expected to keep some land out of production indefinitely, and efforts to diversify agricultural production will sustain area for grains and other crops at the expense of cotton.

Supply prospects in Central Asia, currently the source of nearly one-quarter of world cotton exports, are an important uncertainty in the global outlook. Economic and agricultural reform has been slow in the region's major producers, so reform's long run impacts on yield growth and cross-commodity competition remain conjectural. According to the World Bank, the region's largest exporter, Uzbekistan, is pursuing policies that tax agriculture substantially in order to promote industrialization. Under these circumstances, Central Asia's exports would be expected to grow more slowly than the rest of the world, and the region's share of world trade would fall below 20 percent before 2010.

Soybeans and Products

World trade in both total oilseeds and soybeans is projected to increase faster during 2000-2010 than during the 1980s, but much more slowly than in the early 1990s. Global exports of soybeans and soybean meal are projected to rise at annual rates of 1.3 and 2.3 percent over the projection period, reaching 52.7 and 50.3 million tons, respectively, by 2010. Combined exports of soybeans and meal, on a soybean-equivalent basis, are projected to grow from 95.3 million tons in 2000 to 116.5 million tons by 2010.

World soybean oil trade is projected to grow 2.5 percent annually during 2000-2010, compared with 5-percent growth achieved in the 1980s and 1990s. Although both world and U.S. exports of soybean oil are projected to grow faster than soybean exports during 2000-2010, they are projected to slow compared with trade in other vegetable oils. With the outlook for continued trade growth in oils relative to meals, incentives to produce high-oil content oilseeds and palm oil are expected to strengthen.

Soybeans and Soybean Meal. Projections of U.S. exports of soybeans and soybean meal are 29.1 million tons and 8.2 million tons, respectively, by 2010. The U.S. market share for soybean exports is projected to rise to 60 percent by 2003 as domestic supplies grow relative to foreign supplies. But once prices of competing crops strengthen relative to soybeans, cutting domestic soybean production and reducing export supplies, the U.S. export share is projected to drop back to 55 percent by 2010. Similarly, the U.S. market share of soybean meal trade also edges up to almost 18 percent by 2003 but contracts to 16 percent again by 2010 as foreign supplies expand. These projected U.S. market shares contrast with significantly higher trade shares for soybeans (73 percent) and soybean meal (24 percent) achieved in the 1980s, when U.S. production was a greater proportion of the world total. Limited expansion of U.S. acreage and slowing crush rates eventually constrict exportable supplies of soybeans and soybean meal. Another factor slowing U.S. soybean exports in the longer term is thriving exports of meat, especially poultry. This trend will boost the livestock population and boost the share of protein feed supplies consumed within U.S. borders compared with the past.

Sharply lower soybean prices are expected to slow foreign supply growth from the rapid annual increases of the 1970s (9 percent), 1980s (6 percent), and 1990s (5 percent). Foreign soybean production is projected to climb about 2.5 percent annually in the projections. Foreign soybean yields are forecast to rise at a modest 1.6 percent annually. In the near term, low prices will constrain area harvested and application of inputs by foreign producers. A stronger soybean price situation by 2004 should improve returns and output by foreign producers. In Brazil, steadily expanding domestic meal consumption and exports will support crush demand. However, for several years Brazilian soybean exports are likely to stagnate from the surge in U.S. exports and tighter domestic supplies. Argentina's small consumption base and substantial crush capacity assure long term growth in exports of soybean meal but limits on soybean area should slow production growth and flatten soybean exports.

Gains in world soybean meal consumption from 2000 to 2010 are projected at 2.0 percent annually, compared to growth of 4.6 percent in the 1990s. An important factor behind the slower growth is a projected decline in EU imports of soybeans and soybean meal. Despite projections of the EU being able to export wheat and barley without subsidies throughout the baseline, abundant grain stocks and lower internal grain prices (due to Agenda 2000 reforms) combine to reduce the relative cost of feeding grains versus soybean meal. As a result, increases in grain feeding, partly from stocks, are expected to cut EU soybean meal consumption and imports.

Stronger economies in China and other Asian countries should reinvigorate protein meal consumption in the next few years. But, China's policy maximizing domestic crushing capacity instead of importing protein meal and vegetable oil significantly influences the composition of world trade. China is expected to account for half of the world's growth in soybean imports over the next 10 years. With relatively small soybean meal imports by China, competition among the major soybean meal exporters is likely to intensify early in the projection period. Relatively more favorable meal to bean import prices are likely to pressure crush margins for other soybean importers, curtailing their soybean imports in favor of the low-priced products. However, in the case of Mexico, low U.S. soybean prices are expected to continue to encourage robust imports.

Soybean Oil. Foreign soybean oil production is projected to rise 2.3 percent annually (slightly slower than trade). Growth in soybean processing in Mexico, Brazil, Argentina, India, and China accounts for most of the projected gains in foreign soybean oil production. World use of soybean oil is projected to expand at about 2 percent annually from 2000 to 2010, well below the near 5-percent growth rate of the 1990s. Projected consumption gains are concentrated in the developing nations of Asia and Latin America, with slower growth anticipated for Europe, the former Soviet Union, Japan, and the United States.

Growth in soybean oil trade is projected to slow to 2.5 percent during 2000-2010, compared with about 8 percent in the 1990s when developing countries made sharp import gains. Future growth in international soybean oil trade will be curbed by larger vegetable oil output in China. In addition, rising relative prices are seen shifting soybean oil demand toward competing oils, particularly Southeast Asian palm oil.

The U.S. share of global soybean oil exports is projected to rise to over 14 percent by 2004. Slower growth in domestic soybean oil production, greater South American competition, and

global output gains for other vegetable oils should eventually pare the U.S. market share back to about 13 percent, or 1.3 million tons, by 2010.

Beef

World beef production and consumption are projected to increase about 2 percent annually over the projection period. Some of the largest increases in production are expected to be in China, Mexico, Canada, Brazil, and countries of the former Soviet Union. While beef consumption will increase around the world, the majority of the increase in beef consumption is expected to be in Asia. The largest increases in consumption will be in China, but Chinese trade policies are expected to favor domestic beef production and little increase in imports is expected.

The United States will supply a significant share of increased imports by other countries over the next decade. The largest increase in imports is expected to be in Russia, but most will be supplied by European countries and former members of the Soviet Union. Other large growth markets for beef imports include Mexico and South Korea, each increasing by about 300,000 tons. Taiwan, although a smaller beef importer, will also show rapid import growth, averaging 5.7 percent annually. Japan is projected to increase imports by over 130,000 tons, although the annual rate of growth in that maturing market will be a modest 1.3 percent. Imports by Canada will rise only moderately as increased cattle feeding and slaughtering capacity occur in that country.

Large increases in beef exports are projected for Ukraine, but these exports will go almost exclusively to Russia where they will not compete with U.S. beef. Large increases in exports also are seen for Brazil, but in the absence of FMD-free status, these exports also do not compete against U.S. product. The main competitors to the United States in world beef markets over the next 10 years are Canada, Argentina, New Zealand, and Australia. Exports from New Zealand and Argentina are expected to increase about 2 percent a year and exports from Canada rise at nearly a 2.8-percent annual rate. Australian exports are expected to decline somewhat over the projections period. As a result, the United States is likely to increase its share of the Asian market, but can expect competition from both Canada and Argentina as both increase their production of fed beef. Some of the grass-fed beef from New Zealand is also likely to show up in Asian markets but will not compete strongly with American product. A significant portion of the increased New Zealand production will be imported by the United States to satisfy increased demand for processing beef.

Pork

World pork production and consumption are expected to increase moderately over the projection period. Both production and consumption are likely to achieve 2-percent annual growth, based on GDP growth assumptions and expected higher pork prices. Production growth areas during the 2001-2010 projection period will likely be China and Canada. Favorable resource bases also create the potential for significant growth in the pork sectors of Brazil and Mexico. The factors that will determine the extent of growth of Brazilian and Mexican export potential include macroeconomic stability and rates of improvement in infrastructure.

Consumption in mature pork markets, the U.S., the EU, Canada, and Japan, is expected to grow with population and income over the projection period. Potential for strong consumption growth is focused in Asia, particularly China, and in South America.

Import growth over the projection period develops in Asia as population and incomes grow, and as noncompetitive domestic production sectors decline. Canada, a low-cost producer whose export growth is particularly pronounced early in the projection period, will likely contest market shares in Asian markets heretofore dominated by the United States and the EU.

Poultry

During the 2001-2010 forecast period, poultry meat production is expected to continue to expand as worldwide economic growth increases per capita disposal incomes. Higher incomes are expected to raise per capita meat consumption. With cost advantages relative to beef and pork, chicken meat is expected to garner a larger proportion of the increased meat demand.

Poultry meat consumption is also expected to benefit from a number of social changes in both developed and developing countries. In developed countries, the period 2001 to 2010 is expected to see continuing time pressure on meal preparations and higher demand for partially or fully prepared meals for rapid home preparation. Consumers in developing countries will be likely to purchase a larger share of their meals at newly-emerging food outlets. These may be western-style supermarkets, super stores or fast food restaurants. In many areas, increasing consumption through these outlets will mean a higher percentage of poultry consumption coming from poultry parts rather than whole birds. Higher worldwide consumption will also be driven by the continuing ability of poultry industries to increase production efficiencies and maintain a lower per-unit cost for their products relative to beef and pork products.

As worldwide poultry production increases, there will be further consolidation of production and processing facilities. This will be especially true in developing countries as production shifts from small “backyard” production units to larger ones tied not to local markets for live or whole birds, but to centralized processing facilities. These changes will occur in conjunction with new developments in food marketing and trends towards more away-from-home eating and the demands that these changes will place on food suppliers.

Much of the growth in consumption is expected to occur in the expanding economies of Asia, especially China. China is expected to expand its domestic poultry production and its poultry exports, especially of further processed or de-boned poultry products. At the same time, China’s poultry imports are expected to rise. The other major market for poultry exporters will be Russia. Domestic poultry production in Russia is expected to gradually increase between 2002 and 2010. However, rising poultry consumption is expected to outpace domestic production and Russia and the rest of the FSU should remain a large market for poultry imports.

Trade in poultry products is expected to grow during the baseline period as processors respond to different consumer preferences for various poultry parts across countries. The forecasted growth in trade is based on processors being able to identify markets that have a higher preference for

specific poultry parts which in the producing country are less desirable. This trade is based on a shift in consumption from whole birds to parts. The U.S. poultry sector is based on the domestic consumption of white meat poultry products and the export of less desirable (by U.S. standards) dark meat products to other countries. However, a country with a domestic preference for dark meat could reverse this marketing pattern and attempt to export white meat products to developed countries with a preference for those products.

Even with expectation of increased global trade in poultry meat over the next decade, there are a number of possible issues that may adversely affect the growth in trade. While multilateral trade agreements have lessened trade restrictions, over the baseline period the poultry industry will have to address conflicts regarding growing conditions, disease restrictions, and slaughtering and processing methods.

Table 38. World production and use for selected commodities, baseline projections 1/

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Production												
Coarse grains	876.0	863.0	906.2	922.1	951.4	966.4	981.6	996.9	1,011.0	1,028.4	1,042.5	1,063.3
Corn	605.3	592.4	613.8	626.0	653.0	665.8	679.1	692.0	704.0	719.0	731.0	749.5
Wheat	585.9	579.9	609.7	616.9	625.1	634.1	642.7	650.9	659.9	668.4	676.8	685.4
Rice	402.5	397.3	401.3	405.4	409.1	413.1	417.1	420.9	424.9	429.0	433.2	437.4
Soybeans	157.2	166.2	173.4	175.5	176.4	179.3	183.0	186.3	190.4	193.8	197.0	200.0
Soybean meal	108.2	112.4	115.8	118.6	120.8	123.2	125.8	127.7	129.8	132.0	134.8	137.5
Soybean oil	24.5	25.4	26.2	26.8	27.3	27.9	28.5	28.9	29.4	29.9	30.5	31.2
Cotton	87.0	86.9	91.0	95.0	96.0	97.0	98.0	99.0	100.0	101.0	102.5	104.0
Exporters												
Coarse grains	881.0	887.3	920.8	935.4	952.3	969.1	984.3	999.2	1,014.3	1,029.9	1,045.3	1,062.1
Corn	602.6	612.7	627.4	638.4	653.5	668.0	681.4	694.0	706.9	720.2	733.3	747.8
Wheat	594.1	596.7	607.8	616.6	625.2	634.0	642.7	651.3	659.0	667.3	675.7	684.2
Rice	399.7	401.4	403.1	404.9	408.8	412.8	416.9	420.8	424.8	429.0	433.2	437.4
Soybeans	159.1	164.9	170.2	174.7	178.1	181.4	184.6	187.6	190.3	193.2	196.8	200.5
Soybean meal	110.0	112.8	116.2	119.0	121.3	123.7	126.2	128.1	130.2	132.4	135.2	137.9
Soybean oil	24.3	25.7	26.2	26.9	27.5	28.0	28.6	29.1	29.6	30.1	30.7	31.3
Cotton	91.2	92.7	93.8	95.0	95.8	96.5	97.6	98.7	100.0	101.4	102.8	104.2

1/ Million metric tons except for cotton (million 480-pound bales).

The projections were completed in October 2000 based on information known at that time.

Table 39. Coarse grains trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
<i>Million metric tons</i>												
Importers												
Former Soviet Union 1/	2.6	1.0	1.3	1.4	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.3
Eastern Europe	1.8	1.8	1.3	1.5	1.3	1.4	1.4	1.5	1.6	1.7	1.7	1.8
Japan	20.5	20.0	20.3	20.3	20.2	20.1	20.1	20.0	19.9	19.8	19.7	19.5
South Korea	9.1	8.5	8.5	8.8	9.1	9.3	9.4	9.5	9.6	9.7	9.7	9.8
Taiwan	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.5	5.6	5.7
China	2.6	2.7	4.7	5.0	5.1	5.6	6.3	7.0	7.9	8.8	10.0	11.3
Mexico	9.3	9.5	9.9	10.2	10.5	10.9	11.2	11.5	11.9	12.2	12.5	13.0
European Union 2/	3.0	3.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Latin America 3/	11.1	10.2	9.5	9.5	9.8	10.3	10.8	11.7	12.8	13.8	14.3	14.8
N. Africa & Middle East	23.3	25.5	25.2	25.6	26.2	26.9	27.6	28.4	29.2	30.0	30.8	31.5
Other Asia & Oceania	5.1	5.0	5.8	5.7	5.9	6.2	6.4	6.8	7.2	7.6	8.0	8.4
Sub-Saharan Africa 4/	1.7	1.8	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2
Other foreign 5/	4.5	4.2	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6
United States	2.8	2.7	3.0	3.2	3.4	3.4	3.5	3.5	3.6	3.6	3.7	3.7
Total trade	102.5	101.3	104.4	106.0	108.0	110.5	113.2	116.5	120.4	124.3	127.7	131.4
Exporters												
European Union 2/	12.7	13.3	9.9	9.8	10.1	10.7	11.2	11.7	12.2	12.6	13.2	13.8
China	10.0	4.0	2.9	2.9	2.8	2.7	2.4	2.3	2.1	2.0	1.9	1.8
Argentina	9.7	9.4	10.5	11.2	12.3	13.0	13.8	14.5	15.5	16.0	16.5	16.9
Australia	3.7	4.0	4.2	4.2	4.2	4.2	4.3	4.3	4.4	4.4	4.4	4.5
Canada	3.5	3.5	5.0	5.5	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.7
Rep. of South Africa	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.4	1.6	1.7
Eastern Europe	3.2	0.8	1.6	2.4	2.7	2.9	3.1	3.3	3.4	4.2	4.9	5.0
Former Soviet Union 1/	2.1	1.7	2.3	2.6	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.2
Other foreign	1.4	1.6	1.6	1.7	1.7	1.7	1.6	1.5	1.5	1.4	1.3	1.3
United States	56.2	63.7	65.2	64.7	64.7	65.9	67.3	69.4	71.5	73.7	75.2	77.5
<i>Percent</i>												
U.S. trade share	54.8	62.9	62.5	61.0	59.9	59.7	59.5	59.5	59.4	59.3	58.9	59.0

1/ Includes intra-FSU trade.

2/ Excludes intra-EU trade, covers EU-15.

3/ Excludes Mexico.

4/ Includes South Africa.

5/ Includes unaccounted.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 40. Corn trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
Former Soviet Union 1/	0.8	0.3	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.4
Japan	16.3	16.3	16.0	15.9	15.9	15.8	15.8	15.7	15.7	15.6	15.5	15.4
South Korea	8.5	8.0	7.8	8.0	8.3	8.4	8.6	8.7	8.8	8.9	8.9	8.9
Taiwan	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.2	5.3	5.3
China	0.2	0.2	1.7	2.0	2.1	2.4	3.0	3.7	4.4	5.3	6.3	7.6
Mexico	4.6	5.8	5.5	5.6	5.8	6.1	6.2	6.3	6.5	6.6	6.6	6.7
European Union 2/	2.9	2.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Latin America 3/	10.5	9.7	9.0	9.0	9.3	9.8	10.3	11.2	12.2	13.2	13.7	14.3
North Africa & Middle East	13.4	14.3	14.4	14.8	15.1	15.6	16.1	16.7	17.2	17.8	18.2	18.7
Other Asia & Oceania	5.0	4.9	5.7	5.7	5.8	6.1	6.3	6.7	7.1	7.5	7.9	8.3
Sub-Saharan Africa 4/	1.4	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9
Other 5/	3.9	3.2	3.6	3.7	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.7
United States	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total trade	72.9	72.5	73.5	74.5	75.9	78.0	80.1	82.9	86.0	89.3	91.9	94.6
Exporters												
European Union 2/	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	10.0	4.0	2.9	2.8	2.8	2.7	2.4	2.2	2.1	1.9	1.9	1.8
Argentina	9.0	8.7	9.7	10.5	11.6	12.3	13.2	14.0	15.0	15.5	16.0	16.5
Republic of South Africa	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.3	1.6	1.7
Eastern Europe	2.8	0.7	1.0	1.8	2.1	2.3	2.5	2.7	2.8	3.6	4.2	4.4
Former Soviet Union 1/	0.5	0.2	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8
Other foreign	1.0	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
United States	49.2	57.8	57.2	56.5	56.5	57.8	59.1	61.0	62.9	64.8	66.0	67.9
	<i>Percent</i>											
U.S. trade share	67.4	79.7	77.7	75.8	74.5	74.1	73.7	73.6	73.1	72.6	71.9	71.8

1/ Includes intra-FSU trade.

2/ Excludes intra-EU trade, covers EU-15.

3/ Excludes Mexico.

4/ Includes South Africa.

5/ Includes unaccounted.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 41. Sorghum trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
Japan	2.2	1.6	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Mexico	4.5	3.5	4.2	4.3	4.4	4.4	4.6	4.7	4.9	5.2	5.4	5.8
Other N. Africa & M. East	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other S. America	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Sub-Saharan Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Taiwan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other 1/	0.7	0.7	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7
Total trade	7.8	6.2	7.7	7.7	7.7	7.7	7.8	7.9	8.1	8.3	8.5	8.8
Exporters												
Argentina	0.7	0.6	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.3
Australia	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other foreign	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
United States	6.4	5.1	6.5	6.6	6.6	6.6	6.7	6.9	7.1	7.4	7.6	8.0
	<i>Percent</i>											
U.S. trade share	81.0	82.3	84.6	86.0	85.4	85.7	86.4	87.1	87.9	88.8	89.6	90.4

1/ Includes unaccounted.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 42. Barley trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
Former Soviet Union 1/	1.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6
Japan	1.6	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6
South Korea	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Taiwan	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	2.3	2.4	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3
European Union 2/	0.0	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Latin America 3/	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9
Algeria	0.6	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Saudi Arabia	4.8	4.8	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.5
Morocco	0.9	1.2	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3
Tunisia	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Iran	0.8	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3
Iraq	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Turkey	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Other N. Africa/M. East	2.1	2.4	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4
Other foreign 4/	1.5	1.8	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.9	1.9
United States	0.6	0.7	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Total trade	17.4	18.6	18.7	19.2	19.7	20.0	20.4	20.9	21.3	21.8	22.3	22.8
Exporters												
European Union 2/	10.3	10.6	7.7	7.7	8.0	8.6	9.0	9.5	10.1	10.4	11.0	11.6
Australia	3.0	3.6	3.9	3.9	3.9	3.8	3.9	4.0	4.0	4.0	4.1	4.1
Canada	1.7	2.0	2.9	3.4	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.0
Former Soviet Union 1/	1.4	1.4	1.3	1.3	1.6	1.6	1.5	1.5	1.5	1.6	1.6	1.6
Eastern Europe	0.4	0.1	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.5
Turkey	0.2	0.5	0.4	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.0
Other foreign	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
United States	0.7	0.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	<i>Percent</i>											
U.S. trade share	3.8	4.1	8.1	8.0	7.8	7.6	7.5	7.3	7.1	7.0	6.8	6.7

1/ Includes intra-FSU trade.

2/ Excludes intra-EU trade, covers EU-15.

3/ Includes Mexico.

4/ Includes unaccounted.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 43. Wheat trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
Egypt	5.8	6.2	6.5	6.7	6.9	7.0	7.1	7.3	7.4	7.4	7.5	7.6
Iran	6.9	7.5	4.5	4.6	4.7	4.9	5.1	5.2	5.4	5.6	5.8	5.9
Other North Africa & Middle East	20.8	21.3	20.4	20.9	21.3	21.7	22.0	22.2	22.6	22.9	23.2	23.5
Sub-Saharan Africa 1/	7.4	7.2	7.2	7.4	7.6	7.8	7.9	8.0	8.1	8.3	8.4	8.5
Brazil	7.2	7.7	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	9.1
Mexico	2.6	2.4	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.2	3.3	3.4
Former Soviet Union 2/	8.0	6.0	6.1	5.9	6.1	5.8	5.5	5.3	5.2	5.3	5.3	5.3
Japan	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.8
South Korea	3.8	3.5	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Indonesia	3.9	3.7	3.8	4.0	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5
China	1.0	2.0	2.7	2.8	2.8	3.0	3.1	3.3	3.4	3.6	3.8	3.9
Pakistan	2.0	0.2	0.5	1.1	1.5	1.6	1.9	2.3	2.6	3.0	3.3	3.7
Other	32.5	32.1	30.8	31.2	31.8	32.4	32.8	33.3	33.9	34.7	35.4	36.1
Total trade	107.9	105.6	102.7	105.1	107.3	109.0	110.6	112.5	114.8	117.3	119.7	122.1
Exporters												
European Union 3/	16.0	16.0	17.4	18.0	19.6	20.0	20.4	20.9	21.7	22.5	22.8	23.9
Canada	19.2	18.0	16.0	16.3	16.4	16.4	16.5	16.8	17.1	17.3	17.4	17.6
Australia	17.0	16.5	16.0	16.3	16.4	16.7	16.7	16.8	17.0	17.2	17.4	17.4
Argentina	10.8	11.0	10.5	10.7	10.9	11.1	11.2	11.5	11.7	11.8	12.0	12.0
Former Soviet Union 1/	7.0	5.3	5.5	5.2	5.4	5.6	5.8	6.0	6.3	6.6	6.9	7.4
Eastern Europe	3.5	2.5	3.2	3.3	3.4	3.5	3.7	3.7	3.7	3.8	3.8	3.8
Other foreign	4.8	5.4	4.3	4.6	4.6	4.4	4.3	4.1	4.0	4.0	4.0	4.1
United States	29.7	30.6	29.9	30.6	30.6	31.3	32.0	32.7	33.3	34.0	35.4	36.1
	<i>Percent</i>											
U.S. trade share	27.5	29.0	29.1	29.1	28.5	28.7	28.9	29.0	29.0	29.0	29.6	29.5

1/ Includes South Africa.

2/ Includes intra-FSU trade.

3/ Excludes intra-EU trade, covers EU-15.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 44. Rice trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
Canada	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Mexico	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
Central America/Caribbean	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Brazil	0.7	0.7	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1
Other South America	0.4	0.4	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6
European Union 1/	1.6	1.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
Former Soviet Union 2/	0.5	0.7	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Other Europe 3/	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
China	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
Japan	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
South Korea	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indonesia	2.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
Malaysia	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Philippines	0.7	1.0	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.5
Other Asia & Oceania	2.0	2.7	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2
Iraq	1.0	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Iran	1.1	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7
Saudia Arabia	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1
Turkey	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Other N. Africa & M. East	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.6
Sub-Saharan Africa	4.5	4.5	4.4	4.4	4.5	4.6	4.6	4.7	4.7	4.8	4.9	4.9
Republic of South Africa	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
Unaccounted	2.1	1.0	1.6	1.6	1.5	1.6	1.6	1.6	1.5	1.5	1.6	1.6
United States	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total imports	23.4	25.3	25.0	25.5	26.0	26.5	27.1	27.6	28.2	28.7	29.3	30.0
Exporters												
Australia	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Argentina	0.5	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.0
Other South America	1.4	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8
European Union 1/	1.3	1.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
China	3.2	3.4	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.2	4.4	4.5
India	1.2	1.7	2.4	2.5	2.7	2.9	3.1	3.2	3.3	3.4	3.5	3.6
Pakistan	1.9	1.8	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4
Burma	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Thailand	6.0	6.6	6.8	6.9	7.1	7.1	7.2	7.4	7.5	7.7	7.8	8.0
Vietnam	3.4	4.0	4.2	4.2	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9
Other foreign	1.3	1.6	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
United States	2.8	2.5	2.5	2.5	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7
Total exports	23.4	25.3	25.0	25.5	26.0	26.5	27.1	27.6	28.2	28.7	29.3	30.0
	<i>Percent</i>											
U.S. trade share	11.8	10.0	10.1	9.7	9.2	8.7	8.1	7.8	7.3	6.6	6.1	5.7

1/ Excludes intra-EU trade, covers EU-15.

2/ Includes intra-FSU trade.

3/ Other Western Europe and Central and Eastern Europe.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 45. All cotton trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million bales</i>											
Importers												
European Union 1/	4.0	4.3	4.1	3.9	3.8	3.7	3.5	3.4	3.3	3.2	3.1	3.0
Former Soviet Union 2/	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.5
Indonesia	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.7	2.8	2.9
Thailand	1.7	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4
Brazil	1.3	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.3	1.3
Eastern Europe	1.0	0.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1
Other Asia & Oceania	5.4	4.7	5.0	5.1	5.1	5.2	5.3	5.4	5.5	5.7	5.9	6.1
Japan	1.3	1.2	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4
South Korea	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1
China	0.1	0.7	1.5	1.7	1.8	1.8	1.9	2.0	2.1	2.2	2.2	2.3
Mexico	1.9	2.3	2.3	2.4	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Other foreign	4.6	4.8	5.1	5.3	5.5	5.6	5.8	5.9	6.1	6.3	6.5	6.7
United States	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total imports	27.1	27.2	28.4	28.8	29.0	29.3	29.6	29.9	30.3	30.7	31.1	31.6
Exporters												
Former Soviet Union 2/	6.0	5.7	5.8	5.8	5.7	5.8	5.8	5.8	5.9	6.0	6.1	6.2
Australia	3.2	3.2	3.2	3.4	3.4	3.5	3.6	3.7	3.8	4.0	4.1	4.3
Argentina	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
Pakistan	0.5	0.6	1.1	0.8	1.0	1.0	1.0	1.0	0.9	0.7	0.7	0.5
India	0.1	0.1	0.0	0.0	0.2	0.3	0.4	0.6	0.6	0.7	0.7	0.8
China	1.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
Turkey	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Egypt	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Other Latin America	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Other Sub-Saharan Africa 3/	4.6	4.5	4.4	4.5	4.5	4.5	4.5	4.6	4.7	4.8	4.9	5.1
Other foreign	2.9	2.8	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.3
United States	6.8	7.6	8.2	8.5	8.5	8.5	8.6	8.6	8.7	8.8	8.8	8.9
Total exports	27.3	26.7	28.1	28.5	28.7	29.0	29.3	29.6	30.0	30.4	30.8	31.3
	<i>Percent</i>											
U.S. trade share	24.8	28.4	29.2	29.9	29.7	29.4	29.3	29.2	29.0	28.8	28.6	28.3

1/ Includes intra-EU trade, covers EU-15.

2/ Includes intra-FSU trade.

3/ Includes Republic of South Africa.

Note: Imports exceed exports in projection years by 300,000 bales due to statistical differences across countries' reported trade.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 46. Soybean trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
European Union 1/	16.3	16.1	16.6	16.8	16.6	16.2	16.0	15.8	15.6	15.4	15.4	15.4
Japan	4.9	4.8	4.9	4.9	4.8	4.8	4.8	4.7	4.7	4.6	4.6	4.5
South Korea	1.6	1.7	1.8	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5
Taiwan	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.8
Mexico	4.0	4.2	4.2	4.4	4.5	4.6	4.8	4.9	5.1	5.2	5.4	5.6
Former Soviet Union 2/	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Eastern Europe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	9.7	7.3	7.8	8.0	8.3	8.6	9.0	9.4	9.8	10.2	10.7	11.2
Malaysia	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.1
Indonesia	1.3	1.5	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
Other	7.3	6.5	6.9	7.2	7.4	7.7	7.7	8.0	8.0	8.3	8.4	8.6
Total imports	48.0	45.2	47.1	47.8	48.4	48.9	49.2	49.9	50.4	51.1	51.8	52.7
Exporters												
Argentina	4.8	4.5	3.7	3.4	3.2	3.3	3.3	3.3	3.3	3.3	3.1	2.9
Brazil	10.6	10.0	11.1	11.3	11.3	11.7	12.3	13.0	13.4	14.2	14.5	15.3
China	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Other foreign	4.3	4.4	4.6	4.6	4.7	4.8	4.9	4.9	5.0	5.1	5.2	5.2
United States	26.4	26.3	27.5	28.3	29.0	28.8	28.6	28.4	28.6	28.7	28.8	29.1
Total exports	46.3	45.3	47.1	47.8	48.4	48.9	49.2	49.9	50.4	51.5	51.8	52.7
	<i>Percent</i>											
U.S. trade share	57.0	58.0	58.3	59.2	59.9	59.1	58.1	57.0	56.7	55.7	55.7	55.2

1/ Includes intra-EU trade, covers EU-15.

2/ Includes intra-FSU trade.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 47. Soybean meal trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
European Union 1/	20.0	19.7	19.8	19.8	19.7	19.5	19.3	19.4	19.4	19.5	19.6	19.6
Former Soviet Union 2/	0.5	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2
Eastern Europe	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3
Canada	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Japan	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
China	0.5	1.0	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	4.3
Southeast Asia	3.9	4.3	4.5	4.6	4.8	5.0	5.3	5.5	5.7	6.0	6.3	6.5
Latin America	3.9	4.0	4.2	4.2	4.2	4.3	4.3	4.4	4.4	4.5	4.6	4.6
North Africa & Middle East	3.9	4.1	4.2	4.3	4.4	4.5	4.7	4.8	4.9	5.0	5.2	5.3
Other	2.6	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.5	3.6
Total imports	39.3	39.9	41.4	42.3	43.2	43.9	44.7	45.8	46.8	47.9	49.1	50.3
Exporters												
Argentina	13.1	13.7	15.3	15.5	15.8	16.0	16.6	16.6	17.1	17.4	17.9	18.4
Brazil	9.3	10.2	10.4	10.6	10.8	11.2	11.3	12.2	12.6	13.1	13.7	14.2
India	2.4	2.5	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8
European Union 1/	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Other foreign	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6
United States	6.6	6.6	6.9	7.3	7.6	7.7	7.8	7.8	7.9	8.0	8.1	8.2
Total exports	38.0	39.5	41.4	42.3	43.2	43.9	44.7	45.8	46.8	47.9	49.1	50.3
	<i>Percent</i>											
U.S. trade share	17.5	16.7	16.7	17.4	17.6	17.5	17.3	17.1	16.9	16.8	16.5	16.3

1/ Includes intra-EU trade, covers EU-15.

2/ Includes intra-FSU trade.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 48. Soybean oil trade baseline projections

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	<i>Million metric tons</i>											
Importers												
European Union 1/	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
China	0.6	0.8	0.8	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.5
Other Asia	2.1	2.3	2.4	2.4	2.5	2.6	2.7	2.7	2.8	2.9	3.0	3.1
Latin America	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
North Africa & Middle East	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.2
Former Soviet Union & Eastern Europe 2/	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Other	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total imports	7.2	7.8	8.0	8.2	8.5	8.7	8.9	9.1	9.2	9.4	9.7	9.9
Exporters												
Argentina	2.8	2.9	3.2	3.3	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.9
Brazil	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.9	1.9	2.1	2.2	2.3
European Union 1/	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4
Other foreign	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1
United States	0.6	0.9	1.0	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3
Total exports	7.2	7.6	8.0	8.2	8.5	8.7	8.9	9.1	9.2	9.4	9.7	9.9
	<i>Percent</i>											
U.S. trade share	8.7	11.4	12.1	13.1	13.8	14.4	14.1	13.8	13.7	13.5	13.4	13.3

1/ Includes intra-EU trade, covers EU-15.

2/ Includes intra-FSU trade.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 49. Beef trade baseline projections

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Thousand metric tons, carcass weight</i>												
Importers												
United States	1,304	1,368	1,383	1,395	1,372	1,349	1,327	1,304	1,281	1,259	1,236	1,213
Japan	967	1,000	990	1,013	1,030	1,048	1,068	1,085	1,100	1,113	1,124	1,133
South Korea	210	268	340	368	392	416	442	468	494	518	542	566
Taiwan	93	95	99	104	110	117	124	132	140	148	156	165
European Union 1/	325	347	331	331	331	331	331	331	331	331	331	331
Russia	700	450	450	495	520	544	580	618	659	697	736	775
Easten Europe	55	50	68	63	56	54	55	53	52	50	48	45
Mexico	340	400	425	468	472	485	517	550	588	622	658	699
Canada	261	280	290	292	294	296	298	299	301	303	305	307
Major importers	4,255	4,258	4,376	4,530	4,578	4,640	4,742	4,839	4,947	5,041	5,136	5,234
Exporters												
United States	1,094	1,152	1,118	1,100	1,134	1,168	1,202	1,236	1,270	1,304	1,349	1,395
Australia	1,263	1,213	1,210	1,202	1,198	1,196	1,188	1,181	1,175	1,171	1,167	1,164
New Zealand	420	460	495	508	518	526	534	542	547	551	554	556
European Union 1/	854	646	600	620	645	670	694	738	792	813	817	817
Eastern Europe	100	95	183	176	171	168	161	154	147	141	136	131
Ukraine	131	80	50	168	172	180	188	196	205	215	226	238
Argentina	346	360	390	399	408	418	417	417	417	424	427	431
Brazil	556	625	675	699	742	774	766	763	752	760	772	782
Canada	508	565	575	597	619	641	657	674	689	706	724	745
Major exporters	5,272	5,196	5,296	5,468	5,607	5,741	5,807	5,900	5,994	6,085	6,172	6,258

1/ Excludes intra-EU trade, covers EU-15

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 50. Pork trade baseline projections

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Thousand metric tons, carcass weight</i>												
Importers												
United States	375	453	456	467	479	490	499	506	508	510	513	515
Japan	857	880	900	918	936	955	974	994	1,014	1,034	1,054	1,076
Hong Kong	260	264	275	283	292	302	308	314	321	328	334	341
South Korea	155	140	70	95	100	105	110	116	122	129	138	149
Russia	500	300	400	424	449	476	505	535	567	601	638	676
Mexico	100	130	150	156	162	169	175	182	190	197	205	213
Canada	64	70	70	76	79	81	82	84	86	87	89	91
Major importers	2,311	2,237	2,321	2,419	2,497	2,578	2,653	2,731	2,808	2,886	2,971	3,061
Exporters												
United States	583	571	592	616	640	666	692	720	745	771	798	826
Brazil	75	85	100	102	104	106	110	112	114	116	118	120
Canada	631	750	850	876	902	929	947	966	976	986	996	1,006
Mexico	30	35	40	42	43	45	47	49	51	53	55	57
European Union 1/	1,368	1,141	1,100	1,000	900	896	895	895	895	895	894	894
Eastern Europe	301	306	311	318	324	332	340	349	360	371	383	396
Taiwan	1	0	0	0	0	0	0	25	31	39	49	61
China	119	110	110	111	112	113	114	116	117	118	119	120
Major exporters	3,108	2,998	3,103	3,065	3,025	3,087	3,145	3,232	3,289	3,349	3,412	3,480

1/ Excludes intra-EU trade, covers EU-15.

The projections were completed in October 2000 based on policy decisions and other information known at that time.

Table 51. Poultry trade baseline projections

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	<i>Thousand metric tons, ready to cook</i>											
Importers												
Russia	920	1,000	1,050	1,076	1,103	1,131	1,159	1,188	1,218	1,248	1,279	1,311
European Union 1/	245	273	273	280	287	294	301	309	317	325	333	341
Japan	568	565	550	558	567	575	584	593	601	610	620	629
Hong Kong	1,106	1,120	1,165	1,200	1,236	1,273	1,311	1,351	1,371	1,391	1,412	1,434
China	1,183	1,210	1,250	1,317	1,351	1,384	1,418	1,455	1,473	1,492	1,511	1,530
South Korea	56	64	70	74	77	81	86	90	95	100	105	110
Saudi Arabia	372	373	361	362	369	376	382	388	393	398	401	404
Egypt	2	4	5	5	5	5	5	5	5	5	5	5
Mexico	235	270	284	296	308	320	332	344	355	368	380	393
Canada	134	150	160	165	168	171	174	178	181	184	187	191
Major importers	4,821	5,029	5,168	5,332	5,471	5,610	5,753	5,901	6,009	6,121	6,232	6,347
Exporters												
Brazil	794	900	986	987	991	1,002	1,051	1,103	1,160	1,210	1,264	1,296
European Union 1/	875	833	807	856	845	841	836	832	828	822	816	811
Hungary	114	110	115	117	118	120	122	124	126	128	130	131
China	345	395	420	433	447	462	476	496	507	524	540	558
Hong Kong	780	800	850	864	890	917	944	972	987	1,002	1,017	1,032
Thailand	278	273	273	283	293	303	313	325	331	337	344	353
Saudi Arabia	20	20	20	21	22	22	23	24	24	25	26	26
United States	2,582	2,716	2,748	2,794	2,853	2,912	2,973	3,037	3,098	3,159	3,216	3,273
Major exporters	5,788	6,047	6,218	6,356	6,460	6,579	6,738	6,912	7,061	7,206	7,352	7,480

1/ Excludes intra-EU trade, covers EU-15.

The projections were completed in October 2000 based on policy decisions and other information known at that time.